

Marine Corps Gazette

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JANUARY 1960



The Marines are
landing
with **COLLINS SSB**
COMMUNICATION

On February 16, 1959, Collins received a contract from the Marine Corps for production quantities of AN/TRC-75 Transceivers. Sixty-eight days later the first of these jeep mounted, high frequency communication stations were on their way to Quantico, Va. Modular design of similar Collins equipment speeded adaptation to Marine Corps requirements—saved research and development time and expense.

The AN/TRC-75 can be easily operated by non-technical personnel. Nominal output is 1 kw PEP, with 28,000 channels in the 2 to 30 mc range. It is completely compatible with the Navy's URC-32 500 watt transceiver, as well as the Air Force's ARC-58 airborne 1 kw transceiver and FRC-44 ground system, all designed and built by Collins.



COLLINS RADIO COMPANY • CEDAR RAPIDS, IOWA • DALLAS, TEXAS • BURBANK, CALIFORNIA

Marine Corps 1960

professional notes & comment

Board Seeks Long-Term Plan To Aid Readiness, SNCO Careers

After more than a year of intensive work, plans to overhaul and modernize Marine Corps personnel policies are progressing rapidly. Major aims are to equalize enlisted promotion chances among MOS fields and broaden knowledge and skill levels of staff NCOs. Equally vital, a stable, long-range plan will provide the NCO backbone for rapid limited war mobilization, regardless of budget-imposed manpower cuts.

A planning board headed by MajGen D. M. Weller, Asst C/S, G-1, convened in late December. It plans to take about six months to draft final recommendations. First phase will be to work out details of a "sliding scale"—already approved in principle—to compensate for forced reductions below the 200,000-man strength needed for three combat-ready divisions and wings. Keeping a higher percentage of top NCOs during low strength periods will permit a rapid and orderly build-up to full strength when required.

Next, the board will take a long look at job structures, career patterns and unit structures. These three phases will consider reducing the number of MOS fields, grouping them and tying them together. The aim is to prevent dead ends, top-heavy or bottom-heavy rank distribution, and differences in promotion rates between MOS fields. A solution may involve scheduled transfers between like fields. Controlled large personnel inputs, a key feature in stabilizing transplacement battalions, will be considered for wider use.

Finally, the board will dig into the training and administrative changes needed to make the system work.

The board is no ivory tower project. Actually, it's an "ad hoc committee" of HQMC planners and draws together many well-advanced individual plans. Desired result: A "package" of personnel plans and procedures to give more equal career opportunities to all enlisted Marines; conserve manpower, skill and leadership resources; and insure long-term personnel planning readiness to support the Marine Corps' force-in-readiness role.

SATS: An Idea Grows into Fact

The SATS (Short Airfield for Tactical Support) has progressed from idea to fact. Marine aviation now has the gear to land over the beach, set up rapidly, and fight for a beachhead. More is on the way. HQMC planners say current capability will grow rapidly during 1960 as routine delivery and fitting of aluminum matting, JATO and other operational hardware builds up.

Big problems: fuel, and getting aircraft to the objective area. Tactical Airfield Fuel Dispensing Systems (TAFDS), "buddy" refueling and delivery this year of the Lockheed GV-1 will help solve both. The GV-1 will be a long-range in-flight refueler. Also, it can carry the MOREST Mk-5 mobile arresting gear, now in service. The new M-41 water squeezer and an E. W. Bliss Co. device are now in service evaluation.

Next step: reduce runway length. Some Marine aircraft can operate with present gear from as little as 1,500 feet. Most take 4,000 or more. To land and launch all types in well under 4,000 feet will take a launching device and a better arresting device. Current best bet looks like the Bliss Co.'s (See SATS, page 2)

*An unofficial digest
of news of interest
to the Marine Corps*

Straw Poll for Hump

HQMC will get the word this month on which hard "hump" choice a cross-section of officers prefers. Anonymous ballots chose between two plans to force-out, continue or promote colonels in the next 5-year period. The law authorizes either; either can create needed vacancies.

The hard choice is this: Plan A (two pass-overs and out) will force out 69% of unrestricted colonels in their 25th or 26th year; promote 14% to BGen; continue by selection 17% for a full 30 years. Plan B (selection to stay in) will pluck and retire 35% in their 22d-23d year when they complete five years in grade; 65% stay 30 years. They'd be eligible for promotion one to two years earlier. SDOs are similar, but face Plan A selection in 27th year, stay for 31 if continued.

HQMC asks officers to rate plans by personal preference and also as they affect "the good of the Marine Corps."

Plan A would continue at one time 45 twice passed-over colonels; Plan B, 150. During the 1960-65 period of special forced attrition to level the hump, Plan A lets 58 colonels complete 30-31 years, Plan B, 332.

- Status of top NCO ranks—Sgt-Maj, 1stSgt, MSgt, MGySgt—clarified with MCO 1400.3B. Applicants for DI program will get closer screening, says MCO 1306.7C.

New Weapons Due

Marines will get a limited number of NATO-standard M14 rifles and M60 machine guns this year. The rifle can replace BAR and M1. Ordnance can convert from single shot to automatic. With launcher, it can fire new M26 grenade. Proper tripod is big question with M60. So far, 24-pound mount is favored.

- Marine heavy artillery rocket (Honest John) batteries soon will get "copter-liftable" launchers . . . probably by summer. Final choice now being made between two versions.

- Naval aviation has ordered an all-weather version of the F8U (Crusader). Designated the F8U-2N, the Chance Vought jet will have autopilot and remain aloft over three hours without refueling. It's faster and has engine with

15,000-pound thrust. Meanwhile, first fleet deliveries of the A4D-2N (Skyhawk) are under way. Douglas has new contract for more of these light attack jets.

Promotions, Selections

Convening 5 Jan, a board will make selections for the second phase of the Warrant-LDO program. In its first session, the board picked 149 for appointment to permanent WO and 11 as LDOs with rank of 2dLt. Second board hopes to wrap up its work by Mar.

Four Reserve officer boards also will convene this month. Three will select Cols and WM Majs and Capts for promotion. The fourth will select reservists for duty in the Reserve aviation program. Aviator selectees with rank of Capt will likely get field grade billets.

Promotion boards last month selected 1,412 Marines for rank of GySgt and 1,892 as SSgts. Most promotions were effective in Dec, the remainder probably in Apr.

- Reserve Lts with tours of duty ending before 30 Jun can apply for short-term extensions. Deadline for applications: 1 May. Ref: MCB 1001.

Round-trip Ticket

Returning stateside 2 May, 1stBn, 1st Marines become the first transplacement battalion to complete its tour with 3dMarDiv. Most recent unit rotated to Okinawa was 2dBn, 5th Marines in mid-November. Next will be 3dBn, 5th Marines, leaving from West Coast late this month. It will be followed in April by 1stBn, 7th Marines.

- 2/9 (1st Marines) gave airborne supply methods thorough test in Operation Double Up at Camp Pendleton. 2dBn, 7th Marines wrapped up 3-week Operation Snowfex at Pickle Meadows. Armed Forces Staff College students observed 1/6's landing demonstration at Camp Lejeune.

SATS . . .

systems using Nylon tape wound on large reels. First model, the Buddy-Launch, uses a towing plane for power and will be tested this month. A refined model, the Catapult, is scheduled for test this spring. This replaces the tow plane with a T-34 jet engine. Arresting gear will be very similar, with hopes of combining the two into one system.

Also in the cards for early delivery: an air-transportable, one-man GCA (Ground Controlled Approach) system and a helicopter-transportable visual landing aid system to indicate glide path.

News on the National Scene . . .

Merger of the armed forces looms as a big topic in this session of Congress. The recent push for unification has drawn much comment.

Rep Frank Kowalski (D-Conn) will introduce a bill for "complete, immediate unification" of US armed forces, says *Army-Navy-Air Force Register & Defense Times*. The bill would propose one overall commander, one uniform.

Earlier, the Air Force Assn. endorsed a merger along "functional" lines at its annual convention. LtGen Clarence S. Irvine, USAF (Ret), says *Missiles & Rockets*, proposed a single commander replace the Joint Chiefs. Forces would be divided into worldwide commands for land, sea, aerospace.

From former Army C/S Gen Maxwell D. Taylor there was criticism of US doctrine of massive retaliation. It endangers national security, he said. His proposal: the US should have choices other than complete reliance on total war with nuclear weapons . . . also, a single C/S, abolishing the JCS. All this in his forthcoming book, *The Uncertain Trumpet*.

Chief of Naval Operations Adm Arleigh Burke warned of "schemes to deprive the Joint Chiefs of Staff of their responsibilities as heads of the services." Adm Burke said present system "prevents ivory-tower thinking" and has "built-in checks against excesses of a single individual concept or single interest." Prepared by Adm Burke, the speech was delivered by VAdm W. M. Beakley, DCNO.

At Yuma Shoot-out

Marine standings in OPERATION TOP GUN, all-Navy air weapons meet, at MCAAS, Yuma:

VMF-232, Kaneohe, first in Day Fighter. (1stLt Gary A. Davis top individual with 4,300 points.)

VMF(AW)-513, 3dMAW, third in All-Weather Fighter; VMA-311, 3dMAW, third in Jet Light Attack; and VMF-235, 2dMAW, third in Day Fighter. VMA-224, 2dMAW, fourth in Jet Light Attack.

- F8Us are replacing last of FJ-4B (Furies) and F9F (Cougars) in 2dMAW. VMF-333 at Beaufort is phasing out its FJs. All other MAG-32 fighter units have F8Us. At Cherry Point, VCMJ-2's last F9F has left service. The squadron already has flown the F8U in 21-day photo training mission at Guantanamo.

- VMF-251 has joined MAG-11 in the Far East. In turn, VMF-451 joins 3dMAW at El Toro. . . . In 2dMAW, VMF-251 became first Marine squadron to log 10,000 hours in the F8U.

- The Commandant's Aviation Efficiency Trophy went to VMF(AW)-114, then commanded by LtCol Mark Jones. Present CO is Maj C. P. Blankenship.

New School at Lejeune

Construction contract for a 32-room high school at Camp Lejeune will be awarded soon. A contract to improve

Tarawa Terrace Elementary School has already been let.

Over at Courthouse Bay, new Marine Corps Engineering School buildings will soon house combat engineering, utilities, heavy equipment training.

At Cherry Point, four 2dMAW squadrons moved into new quarters. VMA-324, VMA-533, VMF(AW)-114 and VMF(AW)-115 each got own 12,000-square-foot hanger.

On The Home Front

Some Medicare benefits dropped in 1958 have been restored. These include necessary surgery not considered as emergency; care for acute emotional disorders; emergency outpatient care not requiring hospitalization.

- Service families will get a bigger say about who moves their household goods. An owner can now request a specific mover (if a low bidder), or veto one.

- Navy Mutual Aid Assn. has added \$2,000 to death benefits for members. Armed Forces Enlisted Personnel Benefit Assn. voted a \$42 refund to members.

News in Names

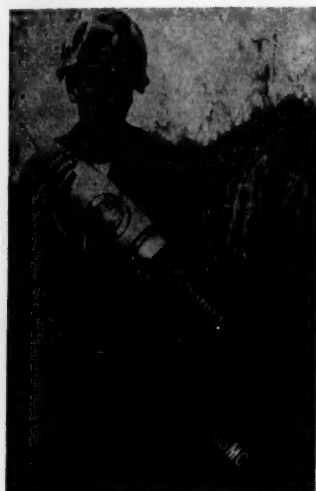
RAdm George H. Wales, Commander of Amphibious Group 2, has moved his flag to USS Boxer (LPH-4). It's claimed as a "first." . . . First CO of MB, Naha, Okinawa, is Maj Robert C. Sebilian. With him are Capt W. W. Damewood and 2dLt Donald R. Damuth, Jr.

Marine Corps 1960

research & development



COBRA



Attaching 5½-lb HE warhead



One man can tote, operate

THE MARINE CORPS BEGINS TACTICAL EVALUATION of a new antitank missile early this year.

The goal: increased range over conventional antitank weapons without sacrificing accuracy or too much fire power.

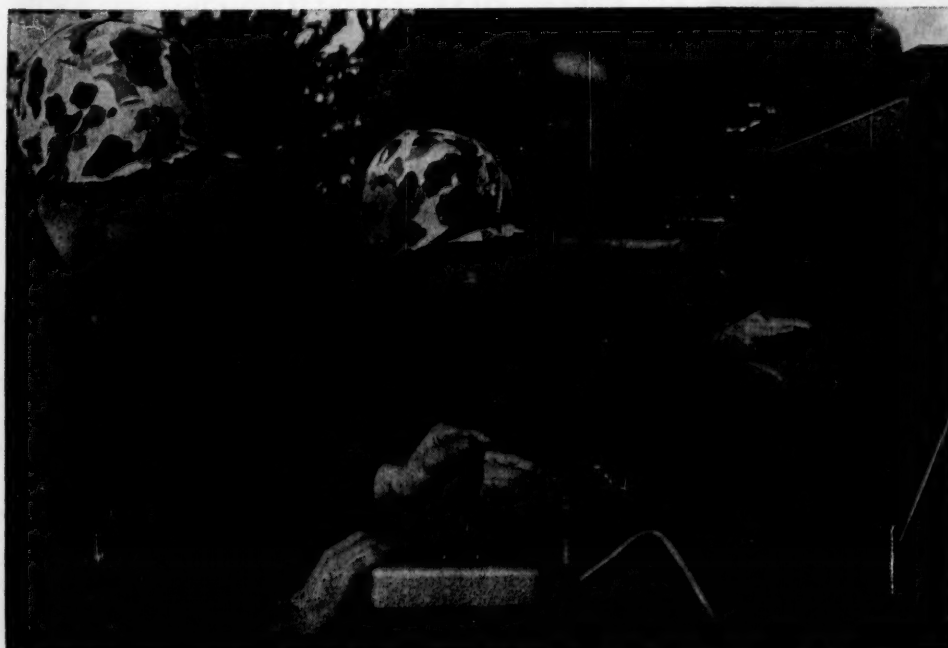
The missile: a product of West Germany—the AT-GM 810 "Cobra."

MCLFDC has been directed to set up the test program. It will be at Camp Pen. The 1st Antitank Bn will do the testing. Canada, also reported interested in improved missile punch for its army is sending observers.

Claimed capable of knocking out any tank, the Cobra boasts a high kill probability at ranges of 500 to 1,760 yards. It weighs 20 pounds, including 5½-lb warhead.

It is 30 inches long, uses solid rocket fuel and goes 190 mph. It is wire-guided. Other features:

- Needs no special launcher. A built-in booster charge pops it into the air at a 20-degree angle with a jerk of the "lanyard."
- Lightweight. One man can carry two Cobras easily on a pack board.
- Equipped with individual firing cables 100 yards long permitting wide separation of gunner and missile.
- Eight missiles can be fired in sequence from a single 4½-lb electronic control box.
- Rudder controlled. By manipulating stick on control box, the gunner guides the missile visually to target. Sig-



Device resembling TV set trains anti-tank men in simulating Cobra fire.

Cobra—

nals are sent along a fine wire which spins out behind the missile in flight.

The Marine Corps is buying 100 Cobras through Daystrom, Inc., Murray Hill, N. J., US representatives of Boelknow Entwicklungen of Munich, the company that developed the Cobra.

☛ A meaner, cheaper "Bullpup" air-to-ground missile that is slated to become standard gear for all Navy attack planes is now in production at Martin Company's Orlando, Fla. plant.

The Navy is so sure of Bullpup they are omitting test equipment with Fleet issue, according to RAdm P. D. Stroop, Chief of the newly formed Bureau of Weapons. "We are so sure that this philosophy is right . . . it [Bullpup] is to be handled as a round of conventional ammunition."

Going power for the improved Bullpup is furnished by pre-packaged liquid fuel (Bullpups now in operation with the Sixth and Seventh Fleets use solid fuel).

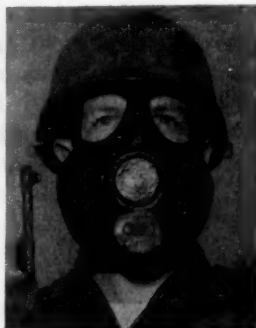
☛ Dehydration and irradiation processes in food are being planned for the battlefield with menus like this sample field ration: Hot chicken slices or fried pork chops; hot lima beans, Waldorf-style onion soup, rolls; and for dessert—pound cake.

Hot water added to the new dehydrated foods turns thin wafers into juicy pork chops; "scraps of paper" become delicious slices of roast beef.

☛ A lighter, improved gas mask with fog and frost proof lenses will gradually replace (as they wear out) the old M9A1.

Gone is the clumsy bag or chin canister. Filters are molded into the rubber face-piece.

A speaker valve at the mouth position assures clear transmission of speech.



M-17 Mask

☛ A robot will soon be helping to get jets airborne faster by running pre-flight checks on electronic gear. Pilot or crew chief can put RADFAC to work checking communication, ID and navigation systems. It does the job in 60 seconds, then advises via tone signals if anything is wrong. Republic Aviation developed it.

☛ An Italian-made 105mm pack howitzer which, on paper, appears to have good potential as a hard-hitting, lightweight, close support artillery weapon was due to arrive by 31 Dec at MCLFDC for extensive tests.

The British tested the piece last year; their performance report: enthusiastic. They reported a range of 10,100 meters; movement via man, mule, air or jeep; good accuracy.

Standard US 105mm ammo can be fired.



M-18 Claymore

"Infantry" reports an early field issue of the M-18 Claymore, a single-shot anti-personnel weapon which delivers steel fragments shot gun style over a fan-shaped beaten zone 2x30x30 meters.

The weapon w/firing system weighs about three

pounds, is carried in a two-pocket bandoleer.

It is claimed to be as rugged as its namesake, the two-edged sword formerly used by Scottish Highlanders.

☛ Mechanical computers are paving the way for tanks, trucks, weapons carriers, etc., by using data from standard instruments (gyrocompass, odometer) to lay out a foolproof land navigation system.

The brain, developed by ERDL, provides vehicle heading, position in map coordinates, direction to home base, and distance and direction to destination.

☛ At Allis-Chalmers Company, tiny cells fueled with a mixture of gases—largely propane—have powered a vehicle for the first time. Director of company research, Dr. H. K. Ihrig, said fuel cells are applicable to military weapons, presumably armor or space vehicles. The Army is considering them as power for infantry radars.

☛ Two new ships ear-marked USMC are included in the Navy's fiscal '60 ship-building program.

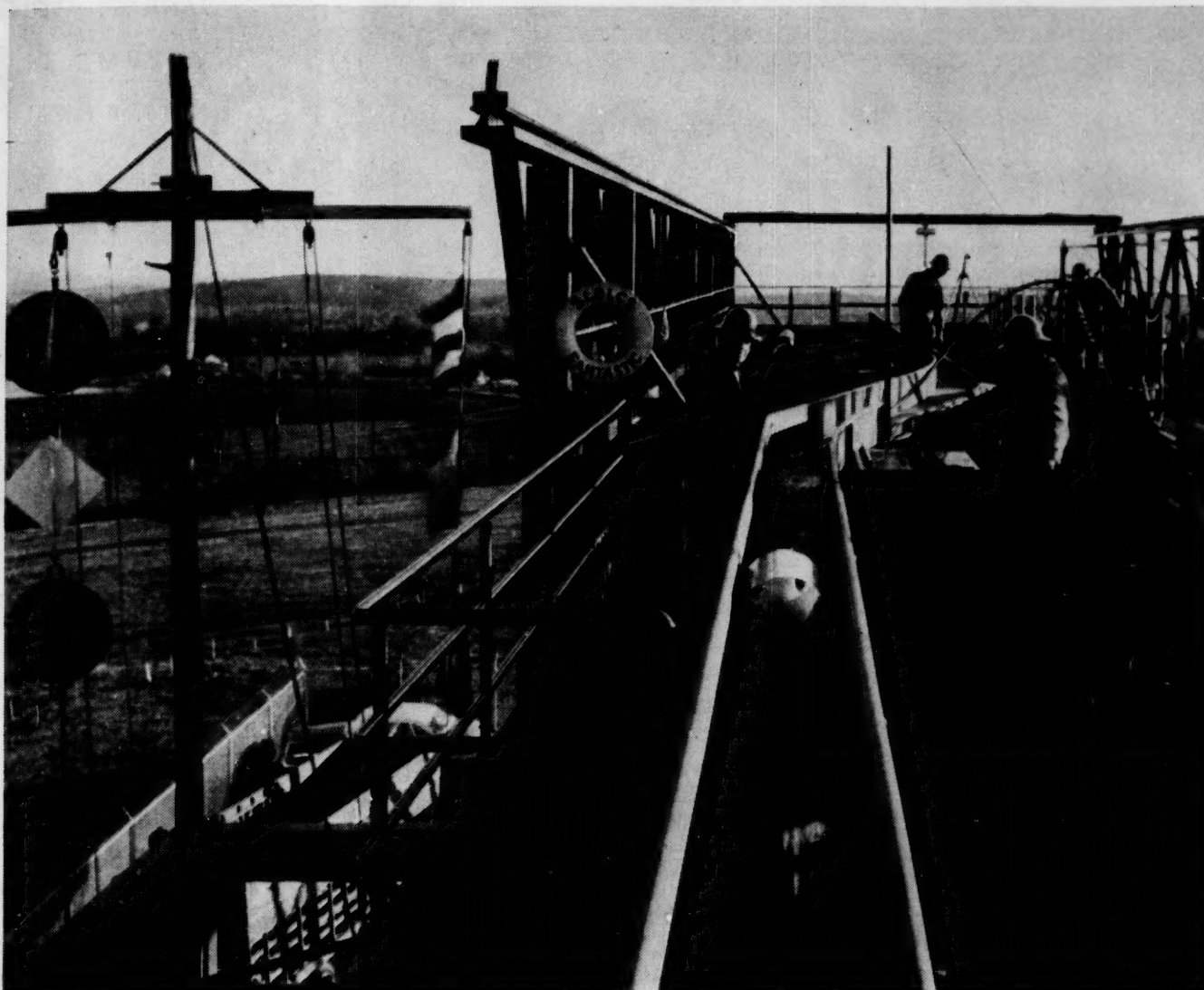
On order are an amphibious transport dock (LPD), and an amphibious assault ship (LPH), geared for helicopters.

☛ HQMC planners are hoping for modernized replacement for amphibious recon-carrying submarines (ASSP). No decision has been reached.

☛ Republic Aviation announces completion of the first full scale mock-up of the "Swallow," a jet driven recon drone that will spy on the enemy with infra-red, radar, cameras and other sensory devices.

It has all-weather capabilities and can be launched from a small, mobile platform. It is recoverable, say its makers, by parachute.

☛ Overheard from "missiles and rockets" "We Hear That" column is news that the Army is thinking about buying (from Thiokol Chemical Corporation) some rocket jump belts for its ground forces.



Engineers study section of cable containing dummy amplifier being payed out. Life preserver inscription stands for "Bell Laboratories Dry Land Cable Ship Fantastic"

★ Come aboard the FANTASTIC! ★

A ship that never sails helps Bell System engineers devise the best way to lay undersea telephone cables

The telephone cables which now connect America with Europe, Hawaii and other distant places have proved enormously successful.

Soon more will be needed — to link other continents, and to handle the ever-rising volume of overseas calls. But the new and lighter cables now being tested call for entirely new cable-laying techniques and equipment.

To save time and money, and permit studies of the problem under controlled

conditions, a mock-up of a cable-laying ship—dubbed the *Fantastic*—has been built on a New Jersey hilltop some twenty-eight miles from the nearest salt water. There, most days, you will find Bell Laboratories engineers busily testing the new methods and equipment they have devised.

Winches whine as long sections of cable are pulled up from the "hold" and payed out "overboard" as if the *Fantastic* were truly at sea. Flying

gaily from a yardarm are maritime signals warning other vessels to stay clear.

Elsewhere in the Laboratories, experiments show how to grip the cable and control its speed, what happens as it sinks into the sea, how fast it should be payed out to fit the ocean bottom snugly. Still other studies plot the hills and valleys of the ocean floor where the cable will eventually be laid.

The result—telephone service across the ocean as good as your own local service. It is progress like this which is the purpose of our constant research and experimentation in all fields of communications.

BELL TELEPHONE SYSTEM





JANUARY 1960
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40¢

PROFESSIONAL MAGAZINE FOR UNITED STATES MARINES

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THIS MONTH'S COVER General David M. Shoup, 22d Commandant of the Marine Corps

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HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON 25, D. C.

IN REPLY REFER TO
AQ-jjlp
1 Jan 1960

Dear fellow members of the Marine Corps Association:

United States Marines have never been found wanting when our country has needed us. In every corner of the world whether using a cutlass, a musket or a jet aircraft, Marines have acquitted themselves with honor and distinction. Each of us intends and expects that this situation will continue to exist.

Time has a faculty for eroding even seemingly impervious institutions. To prevent erosion the people who make up an institution must be constantly alert. The Marine Corps Association is a fine vehicle for fostering alertness through an interchange of fresh ideas.

Throughout our long history, Marines have never had an easy time of things. We never will. Ours is a profession which calls for self sacrifice, dedication and a deep sense of duty.

Upon assuming office as Commandant it was necessary for me to take an oath of office. It occurred to me that my oath was merely a reaffirmation of the principles I swore to uphold when first becoming a Marine. It was, in a sense, a rededication to the Marine way of life.

As we start this tour of duty together, I would like to think that all Marines shared in that rededication.

Our day to day problems sometimes obscure the long range goal. This makes it necessary to pause occasionally to make sure we know where we're going. Our common goal has been and will continue to be that of providing our country a force in readiness without peer. We will continue to provide that commodity.

Sincerely,

DAVID M. SHOUP
General, U. S. Marine Corps
Commandant of the Marine Corps

WINNERS!

1959 Prize Essay Contest

Marine Corps Assn.

Group I

Field Grade Officers, Civilians
No Award

Group II

Company Grade Officers
1st Prize
Capt Paul E. Wilson, USMC
3d8th HowBtry (SP) FAG
MCB, 29 Palms

Honorable Mention

2dLt William E. Jackman,
USMC
MCLFDC, Quantico

Group III

Enlisted
1st Prize
YNC R. Moore, USN
USS Bryce Canyon (AD-36)

Honorable Mention

ASSgt Harold A. Puckett, USMC
H&HS, MCAS, El Toro

Group IV

PLC, Marine Option NROTC,
OCC, MarCads
1st Prize
ASSgt James W. Rider, USMCR
(PLC)
2408 Transit Road
West Seneca, N.Y.

• Non-winning entries in all groups
are being further screened for possible
purchase at regular rates.



MESSAGE CENTER

For letters of professional
interest. Length: up to 250
words. Rates: up to \$20.

Heady Question

... Starting with the most hideous and working down to the lesser of our three headgear evils, I would like to ask: Has anyone ever seen a formation with *uniform* utility caps? They're about as military as bib overalls or straw hats. And the so-called garrison cap, a throwback from WWI, should have been retired with high-neck greens. Lastly, there's the barracks cap, emulated by every filling station attendant and milkman; a cumbersome thing to pack.

The Marine Corps should adopt the beret. It's military-like and could be substituted for the three caps we now have in all except dress uniform. The cost alone should be its selling point... three caps for the price of one.

A Marine-green beret with scarlet diamond on the left side as backing for the brass emblem would look very military. It could be carried without damage in seabag, or hip pocket when wearing the steel helmet.

Too foreign? How about the strains of *Roast Beef of Olde England* at officers' Mess Night? Too effeminate? How about Her Majesty's jollies, the British Commandos? It is a foreign innovation, but so is the Corps itself. We took the idea from the British who got it from the ancient Greeks.

CWO W. O. Koontz

409 Boxwood Rd.
Oceanside, Calif.

The Dye Is Cast

... Ever since 1951, there have been earnest efforts to make our basic combat field uniform sharper looking. The result has been a poor substitute for either a sharp uniform or a combat one. There should be just one consideration in designing a utility uniform: make it the best uniform possible for use by Marine riflemen in combat.

And while they're about it—why not, since concealment is so strong an issue, camouflage it in the dye vat?

Capt A. D. Allen, Jr.

3/6 2dMarDiv
Camp Lejeune, N. C.

Other Ways to Exercise

... Let's re-evaluate our method of instructing the M1911A1 Cal. .45 pistol before we give up on it. How many times have we sat in on a class where the .45 was introduced this way:

"Gentlemen, this is an L-shaped piece of steel designed to drive a man crazy."

Right off the bat we've gotten an idea of defeatism.

Good shooting requires coordination of the body and the mind. Consider the extending of the arm. In reality, about the only exercise the arm gets in that position is reaching for another beer—or pushing away the women.

There is only one position where the pistol points naturally at the target. Finding this position takes practice.

The sight alignment is simply mind over matter. Stress the front sight—the rear

sight—the perfect sight alignment.

And why gripe about the .45 having an awkward grip? The pistol is our tool. How many carpenters do you know who require custom-fitted handles for their hammers?

Let's release that mental block by relaxing the Charlie-horse between our ears. Then watch those groups on the target tighten up.

1stSgt A. B. Kouma

MS&M Bn 1st FSR (—) FMF
Camp Pendleton

Ed: If nothing else, the Colt .45 kicks up quite an issue. For more of the never-ending battle, see page 67.

A Spade is a Spade is a Spade

... In three different articles of your November issue you speak, with pictures, of the Bullpup missile. In Capt Newton's view (*Missile Report—1959*) it is "comparatively inexpensive, highly accurate, simple in design" and "is now being introduced into Marine attack squadrons."

It would be difficult to stray further from the truth.

VMA-121 recently completed the first Marine firing of this missile. To print a spade a spade, the Bullpup was found to be too complex, too costly, and woefully inaccurate in addition to many other shortcomings.

It is my considered opinion that it has no tactical application in the foreseeable future.

The GAZETTE is an independent publication of the MCA. ... We have no apron strings leading either to service contractors or to executive departments of the government.

As a member of the Association, I consider it less than congruous for the GAZETTE to contribute to the national complacency by publishing information on so-called operational weapons which is less than factual. We should, more properly, be highly selective of weapons' capabilities before affixing our stamp of approval.

Let's leave the eyewash to the more commercial publications, and content ourselves with the facts.

We can fight with facts.

Maj W. L. Traynor

VMA-121, MAG-15
MCAS, El Toro, Calif.

Reaching the Outfield

... With my renewal may I say that the quality of GAZETTE has greatly improved during the last two years... in timely content, variety, and readability.

I realize there are as many suggestions as there are readers however, I believe articles like LtCol Pierce's *Force in Readiness, 1959* (GAZETTE: Nov '59) contain universal interest. It thumbnailed a great deal of contemporary material which is difficult for those of us working away from the Marine Corps to get.

Capt W. J. McManus

Ft. Bliss, Texas

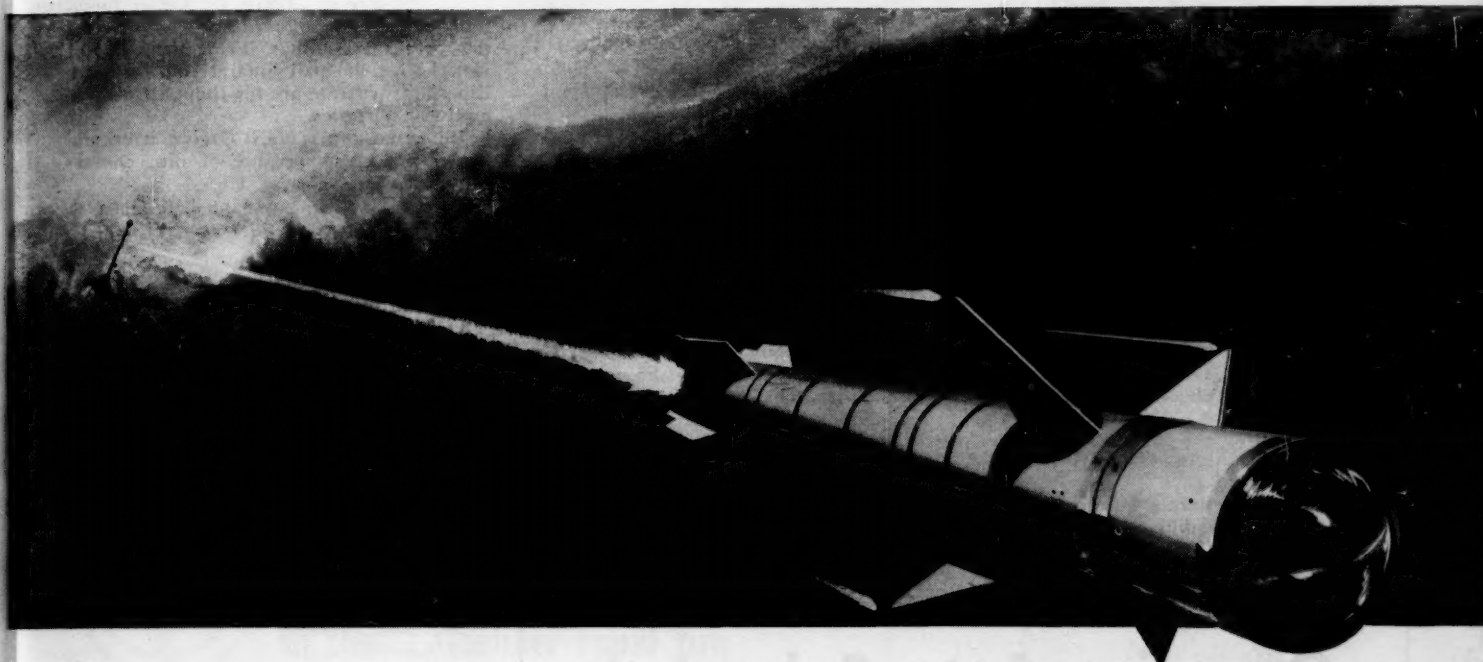
(Continued on page 10)

Marine Corps Gazette • January 1960

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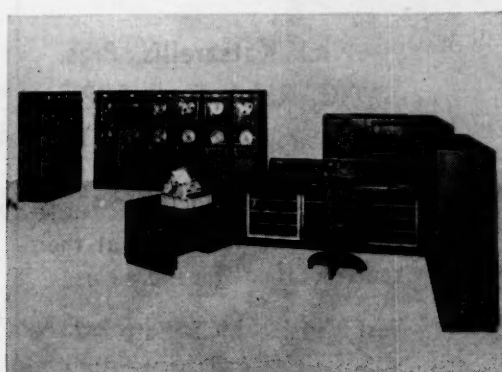
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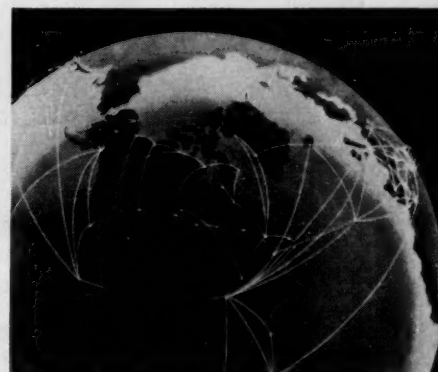
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Gone But Not Forgotten

... When a friend passes on, you're supposed to speak only good of him. I can't do that for the lamented '03 Springfield. It had too many faults.

1) The .30-06 cartridge was overloaded. The '03 kicked worse than any military rifle in the world.

2) Muzzle flash gave away the firing point; some men hesitated to shoot at all.

3) The piece was a foot shorter than most infantry rifles of its time. This doesn't help bayonet fighting.

I hate to emphasize the faults of our departed friend—but we can't afford such mistakes again.

Col Boris d'Adamovitch Leliwa
formerly Imperial Cossacks
Winchester, N. H.

Job Titles and Badges

... After living with the new enlisted rank structure for a year I see both strength and weaknesses in it. The several advantages such as the improved ratio of NCOs to privates, and the return of the master gunnery sergeant and gunnery sergeant are obvious. These need no further discussion here.

The weakness I see in the system is the fact that the rank titles and insignia do not represent what they seem to. The Marine infantryman, cannon-cocker, tanker, etc., deserve to be recognized as "line" Marines by all who see them. Theirs are the most hazardous jobs in combat; the most arduous training schedules in lulls between wars.

Recognition is desirable for the aviation Marine who has a different but equally

vital job of keeping them flying. Then there is the excellent support from the mechanics, communicators, cooks, bakers, drivers and supply men—Marines who do their job well and take pride in it.

My point is that I believe a Marine would like wearing an insignia on his chevrons that is more closely associated with his duties.

ASSgt C. R. Robinson

H&S Co, MS&M Bn
Camp Pendleton, Calif.



Shooting in the Clutch

... AGySgt McAllister's *Requal Scoring* (GAZETTE: Aug '59) is still a timely topic around this shop. Most of the arguments against his recommendation cite the pressure factor. This is missing the point. McAllister's idea offers *days* of pressure.

For those who still prefer the one time clutch-type record-day, I have this recommendation: sight-in one day, fire for record the next.

AMSgt Gerard Dhooge

HqBn, HQMC

Nuclear Hypnosis

... People who are ready to scuttle the US Navy and Merchant Marine should come out of their nuclear hypnosis and return to building up our conventional arms. As an eye-opener I suggest Dr. Sokol's article *Transportation: Basis of Power* in the Oct issue of the GAZETTE.

In this rocket age, ships and men provide the force-in-readiness.

AMSgt J. W. Jaunal

1stRadCo
FPO, San Francisco

Not Once But Thrice

... *Prestige or Dignity* by AMSgt Zaccarelli (OBSERVATION POST: Nov '59) deserves two or three readings. From my point of view he hit the nail squarely on the head. Especially accurate are his thoughts on promotion policies.

More than one staff NCO gives it up and leaves the Corps because of dim chances for promotion.

ASSgt J. R. Gummow

Force Troops
CamLejeune, N. C.

Breach of Office

... *Prestige and Your Office* by AMSgt M. L. Taylor (GAZETTE: Oct '59) is one of the finest articles about office management I have ever read. He puts it simply and concisely; pinpoints the basic breaches of office management found in almost every office in the Marine Corps.

Having spent ten years in the OI field, I find everything he said in his article to be the rule in normal office procedure.

I would like to see more articles of this nature in the GAZETTE.

ASSgt N. M. Radel

HqBn, 3dMarDiv (Reinf)
FPO, San Francisco

Never Fade Away

... The Marine Corps emblem/USMC stencil on our utility coat is fading beyond recognition. After three or four washings it's nearly erased. The ink or dye used is not suitable.

Proper authorities should let the manufacturer know this. Ink or dye that won't come off should be used.

We don't want the Marine emblem to fade away, ever.

AMSgt S. Guido

HqCo, Repair Bn
MCSC, Albany, Ga.

Lock 'em Up

... We believe we have a way to handle rifles at a Reserve training center with minimum time loss and maximum security.

When a man joins our unit he is required to buy an individual lock for his position in the rifle rack. These locks are purchased locally by the battalion commander. He and the inspector-instructor have a master key to all locks.

At each drill period the battalion armorer unlocks each rifle rack (standard Marine Corps rifle rack) and individuals get their own weapons by unlocking them from the assigned slots. No paper work; no loss of time.

LtCol T. M. Burton

I-1, 16th InfBn, USMCR
1700 E. Potter
Milwaukee, Wisc.

(Continued on page 12)

Marine Corps Gazette • January 1960

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Sergeant, U.S. Army
Score: 879-35



John C. Forman
U.S. Border Patrol
Score: 877-40

these shooters scored
a clean sweep of
the first 3 places
in the .22-caliber
championship!



and at the
PAN-AMERICAN GAMES
in the .22-caliber rapid fire

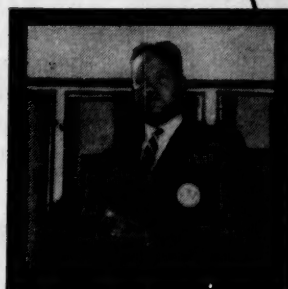
the Champion....
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ALL USED HI-STANDARDS!

Year after year, match after match, more Hi-Standard pistols are the personal choice of top performers in military and civilian .22-caliber competition than all other makes combined. Next time you're on the range, look around and count the Hi-Standards.



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David Cartes
Lieutenant, U.S. Army
Score: 584 x 600



Aubrey E. Smith
Sgt. 1st Class, U.S. Army
Score: 573 x 600



The Gold-Medal-Award-Winning United States Team
Left to right: Lieut. David Cartes, M/Sgt. Roy Ratliff,
Sgt. First Class Aubrey E. Smith, M/Sgt. Richard Stineman

THE HIGH STANDARD MANUFACTURING CORPORATION, Hamden, Conn.

(Continued from page 10)

Reviewing the Review

... I followed the review of Miksche's *The Failure of Atomic Strategy* (PASSING IN REVIEW; Nov '59) with interest until I came to the comparison of troop strength, West vs Soviet Bloc. Somebody's wrong: either a) the author, b) your reviewer, or c) your proofreader.

The review states that the Western powers have 6,233,700 men under arms. The next sentence indicates that Western armies have 1,231,000 men. I think that big a difference rates an explanation.

Another inconsistency in this same paragraph leads me to believe that a million or so men were lost to the West somewhere between the reviewer's pen and the com-

posing room. Quote: "... the Western armies should be able to form 148 divisions from their 1,231,000 men. Of this, the US Army with 1,034,000 and the US Marine Corps with 215,000 enlisted men would form 83 divisions!"

Doesn't make much sense, does it? Hope I don't have to buy the book to get straightened out.

Maj C. F. Runyan

Falls Church, Va.

Ed: You're right. We lost 1,000,000 men. Two typos compounded some confused figures. The review should have read that the West outnumbered the Soviets in Europe by 1,013,000 men, not 1,213; Western "army" strength should read 2,231,000, not 1,231,000. Col Miksche's total of 6,233,700

Western men under arms includes navies and air forces. His Western "army" figure of 2,231,000 includes the US Marine Corps, omits German, Turkish, French territorial, and some British forces. He does calculate that 1,034,000 US Army and 215,000 US Marine troops should form 83 divisions; the 217,000 men of the Benelux countries, he says, should form 14 divisions. Our error was bigger than the 15 percent discount we give our eagle-eyed members on this book.

Scratchboard Scratched

... It appears that AMSgt Welsh, whose scratchboard illustration comprises the cover of the Oct GAZETTE, should pay more attention to his map reading. The 1000 meter extension of his graphic scale has only nine graduations; also, the 500 meter figure is at the 400 meter mark, as is the one-half mile figure incorrectly placed at the four-tenths of a mile graduation.

2dLt G. B. Rhinesmith

SerBn, 1stMarBrig

Forget Me Not

... Apparently the GAZETTE has lost its memory. Last year when you plugged ... children's "Christmas specials" at the GAZETTE Bookshop you conspicuously failed to include the best of all: *The Story of the U. S. Marines*, by Maj George P. Hunt, late of the 1stMarDiv and now on the staff of Life.

Noting the omission then, I wrote you a rather tart letter (MESSAGE CENTER: Feb '59) and received assurance that this perennial favorite would not be overlooked in 1959.

Comes now the Nov issue, complete with not one but two "children's specials" advertised by the Bookshop, and—you guessed it—no mention whatever of Maj Hunt's book.

What are the chances for Christmas 1960?

Col R. D. Heinl, Jr.

US Naval Mission, Haiti

Ed: Rather slim. We agree Maj Hunt has a fine book (\$1.50 at our bookstore). We advertise our statistically proven best sellers.

Garland for a Workhorse

... Thought your Nov '59 issue was only an exceptional anniversary number and that another year would pass before such another splendid effort would appear. But no, the Dec '59 Gazette arrived today and I find it surpasses even the November issue in superb informative articles of interest to professional Marines.

I was especially pleased to note more attention given the HR2S. One of the biggest troubles we have in working with ground troops is that they underestimate the capabilities of this dependable workhorse.

However, as we iron out our mutual problems ... the true potential of the HR2S is being realized.

1stLt J. M. Tivnan

HMR(M)-461

MCAF, New River, N. C.

Ed: Thanks. The quick way to "iron out mutual problems" is a professional, informative article in the Gazette. We exist to discuss YOUR professional problems.

Enough Said

... Congratulations on your excellent magazine. The finest I've ever read!

1stLt R. R. Glaser

MCSC, Barstow, Calif.

Marine Corps Gazette • January 1960

Your Standard Brandsman stands watch



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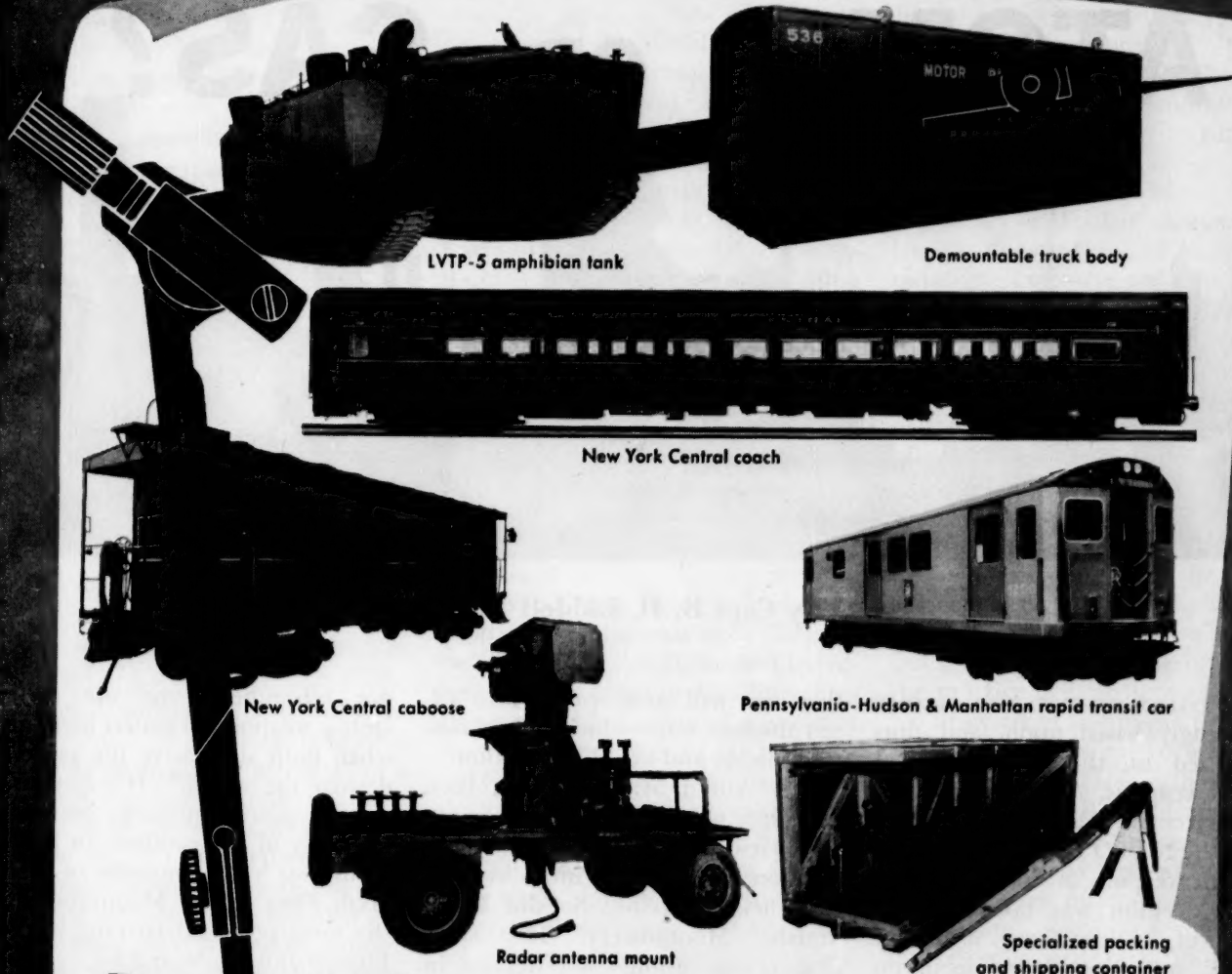
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ATOMS OR GAS?



By Capt B. H. Liddell Hart

WESTERN DEFENSE HAS BECOME increasingly based upon, and thus committed to, the use of tactical atomic weapons. The commitment started from the decision in 1954 to equip the NATO forces, ground and air, with weapons of this kind. The fateful decision was taken on the advice of the military heads of SHAPE, following their conclusion that such weapons would counterbalance the Soviet's Army's superior number of troops—and were essential to give the NATO forces a chance of checking it.

But since then the Russians, too, have developed tactical atomic weapons. So it is no longer possible to count on NATO equipment of this kind as a counterbalance to the Russians' superior numbers. It is also very doubtful whether tactical atomic weapons favor the defense more than the attack.

At the same time it is known that the Russian troops are highly trained for operating under atomic battle conditions, especially in skilful use of dispersion and darkness. Indeed, they may be better trained for this "game" than most of the NATO troops.

Moreover, the military heads of NATO have never shown any confidence that atomic action can be limited, and confined to the tactical field. On the contrary, they have often conveyed the impression that once such weapons are unleashed,

their use will soon spread into all-out nuclear war—which means mutual suicide and world destruction.

Gen Alfred M. Gruenther, then the Supreme Commander, expressed that view even in 1954, when the decision was taken to introduce tactical field weapons. So did Field-Marshal Montgomery. That same gloomy conclusion was reiterated in 1957 by Gruenther's successor, Gen Lauris Norstad, who said that in his own mind he found it impossible to draw a line between the tactical use



of such weapons, against an attacker's forces, and their strategical use, against the homelands.

The conclusion was re-emphasized, with greater force, by Adm Charles R. Brown, the Commander-in-Chief of the Allied Forces, Southern Europe. Speaking in Washington, just before taking over this high command, he said: "I have no faith in the so-called controlled use of atomic weapons. There is no dependable distinction between tactical and strategic situations. I would

not recommend the use of any atomic weapon, no matter how small, when both sides have the power to destroy the world." His conclusion was the more significant because of his study of the problem in his previous post as Commander of the US Sixth Fleet in the Mediterranean—the most powerful striking force in Europe and the Near East.

Is there any better, and more hopeful, alternative in sight as an effective but non-suicidal means of defense?

Gas offers such an alternative—especially in the new disabling but non-lethal forms that have been developed. Even in WWI the most effective chemical weapon was mustard gas, which disabled more but killed fewer than any other important weapon. Moreover it favored, and aided, defense by its obstructive and delaying effect.

Now, new gases have been developed which are far more paralyzing as an antidote to aggression. They can "make a cat frightened of a mouse"—not only in the metaphorical, but in the literal sense of the phrase.

This development fulfills a vision of nearly 40 years ago. I argued, soon after WWI in a little book on *The Future of War*, that "self-interest as well as humane reasons demand that warring nations should endeavour to gain their end . . . with the least possible permanent

injury to life and industry. To inflict wide-spread death and destruction is to damage one's own future property, and, by sowing the seeds of revenge, to jeopardize one's future security." I went on to suggest: "Chemical science has provided mankind with a weapon which reduces the necessity of killing and achieves decisive effects with far less permanent injury than in the case of explosives."

Ironically, this hopeful prospect was hindered by the solemn prohibition of the use of gas in warfare which was formulated and agreed at the Washington Conference of 1921, and subsequently repeated at Geneva. The signatory powers in Washington added to the prohibition an undertaking "to denounce the use of poisonous gases and chemicals in war, as they were used to the horror of all civilization in the war of 1914-18."

That denunciation was an emotional revulsion, particularly against a novelty in weapons, rather than a reasoned conclusion from the facts of war experience. Its irrationality became evident in analysis of the casualty figures—of which full and classified details were compiled for the British and American armies. Among the British casualties from bullets or high explosive shells, the proportion was approximately one dead out of every three men hit, whereas among gas casualties only one man in thirty died.

The American figures were even more illuminating. Coming into the war at a late stage, their army met gas warfare at its peak, and nearly one third of their total casualties were caused by gas. But only one in fifty died compared with one in four of those [casualties] caused by bullets or high explosive shells. Thus a soldier disabled by gas had 12 times as much chance of recovery.

The difference between the British and American ratios is explained by the fact that the British suffered the chlorine gas attacks of 1915 and the even more deadly but less pain-causing phosgene gas in 1916, whereas by the time the Americans arrived on the battlefield these types had been largely superseded by mustard gas, which was more effective but less lethal, even though painful.

In the first gas attack, Ypres in

April 1915, the French and British troops at Ypres were taken unawares, and the sight of men choking to death as the greenish-yellow mist spread over their trenches produced a feeling of terror and horror—which was vastly multiplied by sensational reporting, and subsequent propaganda. In these first attacks, too, the death-roll was nearly one in four of those affected. A novel weapon that caused almost as high a proportion of deaths as the conventional bullet or shell naturally appeared more barbarous. That first

Gas offers an alternative, as an effective, but non-suicidal, means of defense.

impression, and its exploitation by propaganda, obscured from the public mind the much-diminished lethality in proportion to disabling effectiveness of the improved gases that were employed later in the war.

Yet a clear deduction from the death ratios among casualties was that "poison gas" as used in WWI was far more humane as a weapon than shells, bombs, or even bullets. That applied even to the more painful forms of gas—for most men would prefer a period of pain to a ten times greater chance of death. Moreover the relative humaneness of the chemical weapon was all the greater because the military effect

could be, and was, achieved without the destruction of towns and devastation of countries inevitably produced by explosive weapons.

Thus the main effect of the Washington and Geneva prohibition of gas was, ironically and tragically, to preserve for the battlefields of the future the more fatal effects of high explosives, and their shattering effect on the structure of civilized society. For explosive weapons destroy the economic foundations of a return from war to peace. Once the conductors of war were left without an alternative kind of weapon, that danger was bound to increase as air-power developed—and would be immensely multiplied by the development of atomic power.

Although research and experiment with gases continued, the signed agreement to prohibit their use in war became a restraint on military study of the tactical use of gas and the practice of it in troop exercises. No army liked to appear to be preparing to employ gas in war.

Such restraint was reinforced by the soldierly dislike of unconventional weapons, that has always been prevalent. It was typified in ancient times by the Spartan commander Archidamus, who, on seeing a dart shot from a new catapult-machine, exclaimed "O Hercules, the valour of man is at an end." In the same spirit the Chevalier Bayard, the model of medieval chivalry, showed no mercy to musketeers, in contrast



Hiroshima — 1945

to his kindly treatment of captured swordsmen and pikemen.

There was also a soldierly distrust of the value of non-lethal gases. That was typified by the response made by a general concerned with such weapons to the British chemist who suggested the use of dichlorethyl-sulphide (mustard gas)—two years before the Germans adopted it. The general's immediate question was: "Does it kill?" The chemist replied: "No, but it will disable enormous numbers of men temporarily"—whereat the general said: "That is no good to us; we want something that will kill."

Such soldierly dislike and distrust of chemical weapons, coupled with lack of familiarity and practice with them between the wars, were influential factors in preventing the use of them in WWII—as influential, probably, as the deterrent knowledge that both sides possessed and could use them in retaliation if they were re-introduced. In a similar way, the CDL tanks (fitted with special flicker searchlights for blinding the enemy as well as night-firing), a British invention on which many million pounds were spent, were never used in the war—having been kept so secret that the commanders in the field regarded them distrustfully and thus repeatedly hesitated to employ such unfamiliar instruments.

If the Western Allies had used mustard gas in 1940 they could almost certainly have stopped the Germans from breaking through the Meuse front and overrunning France. For even if the tanks could have driven on, the foot-marching infantry masses could not have followed to back them up, and they would have been left isolated. Thus France could have been saved from defeat. In 1944-45, too, the Germans

could have held up the Allies' land advance by the same means, even though they might still have succumbed to the Allies' overwhelming air attack.

That reflection casts doubt on the oft-repeated assertion that, in an emergency, nations will use any means to save themselves from defeat, and to win the war, regardless of any rules of war to which they have agreed in peacetime. Unfamiliarity with a weapon, and uncertainty about its results, have as much restraining power as any treaty promise.



But in the limitation of war, the restraint on the use of gas that followed its formal prohibition and practical discard after WWI has not proved to the advantage of humanity and civilization. The development of explosives continued apace, led on to the atomic bomb, and culminated in the hydrogen (thermo-nuclear) bomb—which now threatens world destruction. Moreover, countries which may be invaded nowadays by an aggressor with numerically superior forces, using conventional weapons, are faced with the grim choice between the certainty of defeat, which spells enslavement, and the near certainty of suicide, if nuclear weapons are used in their defense.

A reversion to chemical weapons would at least offer a better alternative, and more hope of successful defense without suicide—if deterrence fails. Chemical weapons are most effective in checking invasion and delaying all advancing movements on land, whereas they are far less effective against stationary forces and cities. By the end of WWII, new gases were developed that could penetrate any advancing tanks and knock out their crews within a fraction of a minute. While mustard gas is not so decisive as an attack-quencher it has immense disabling and delaying power, and remains supremely effective in the latter respect.

It is particularly absurd to forego the defensive use of mustard gas, the most obstructive yet least lethal of weapons, while adopting the use of nuclear weapons—which are weapons of mass-slaughter, and violate the lawful code of warfare on more counts than such a weapon as mustard gas, which is relatively humane.

Moreover the latest types of nerve-gas now developed are much more effective still in producing a short-term disablement of the attackers, without killing. They paralyze the will to fight, and quench the valor of the fiercest attacker.

Their effect is most strikingly, and laughably, demonstrated by putting a mouse into a box along with a cat. The cat promptly pounces on the mouse—but, after a whiff of the new gas, has its instincts reversed. Every time the mouse approaches, the cat jumps back in fright—even falling over backwards in its efforts to avoid the mouse! Such a demonstration, and such a gas, provide a far more hopeful portent for peace and humanity than the multiplication of the atomic deterrent. US ♣ MC

★ ★ ★ ★

Save Who? ? ?

♣ I WAS AMONG A GROUP OF RECRUITS reporting into Marine Corps Recruit Depot, Parris Island, SC. We were naturally somewhat "shook up." We became even more "shook up" when we saw the sign on the door of the captain's office — "KNOCK BEFORE ENTERING; THE LIFE YOU SAVE MAY BE YOUR OWN."

Sgt J. L. Wilson

Seeing Is Believing

♣ THE SIREN WARNED MIDWAY ISLAND MARINES that WWII Japanese cruisers were close by. As the troops hit their holes, one Texan climbed the lookout tower. "Why?" the gunny asked him, among other things, in the post-raid critique. "Well, Sarge," was the answer, "If I'm agoing to get it, I want to see it coming."

A. A. Johnstone

THE SALTY SKIPPER

SAYS

*Battles are won by men.
Know yours well.*



THE OTHER NIGHT AT THE QUARTERS, CAPT CHUCK Browne and his wife were over for supper. After a tasty meal with the little women, Chuck and I sat down in the living room with an after dinner smoke to solve all the problems of the Marine Corps, as we always do.

"You know," Chuck said, "you sure hear a great deal of talk these days about what a platoon commander should know before he joins the FMF."

"Right, Chuck. But the training those fellows get today at Basic School is certainly better than we got. They stay in Quantico over six months now. When you and I were coming through we had just three months. There was a war in sight."

"True, Salty, but even with an ichi-ban syllabus, what they get is purely technical or semi-technical. You and I learned all we could about infantry weapons and tactics. Still, it wasn't 'til I joined the 2d Marines that I acquired the know-how about men. It didn't take long to find out that the men in my platoon were the most important ingredients in the outfit."

"Boy, truer words were never spoken. I remember our old CG saw to it that we knew our men, too. Cigar, Chuck?"

"Dozo. Say, remember those file folders we kept on each trooper? Let's see, the folder had the man's name..."

He started to count them on his stubby fingers.

"... clothing size, especially the shoes—his nickname, hobbies, hometown, shooting qualification, birthday..."

"Wait. Let me add a few: schooling, family, allotments, offenses and date of rank. You know, Chuck, it sure paid off. Even overseas we didn't have some of the personnel problems which confront lieutenants today."

By now Chuck was on his big feet walking post among Mary's knick-knacks. At last he muttered, "I heard about a Marine corporal who won the Smallbore Prone National Championship at Camp Perry. It turned out that this corporal—for recreation—fired on weekends in civilian smallbore matches all over southern California. Nobody knew he was a Marine until some

members of the big Marine Corps team got curious at one of the shoots.

"I really wonder whether his platoon commander knew it either until TAD orders arrived."

His musings alerted me. "That ties in with our experiences, doesn't it? Remember how old Capt Blaze would inspect your folders each month, then quiz you on what you knew about your men? It got so I could tell each man by looking at the bottoms of his feet. As a matter of fact, I knew the men so well, lots of times I could help them with personal matters before they became problems."

"A good point," Chuck replied. "I asked Jane last week after she gave me a rundown on her afternoon at Navy Relief—how can so many men with routine personal problems end up at Navy Relief? Why don't they see their platoon or company commander first? I guess some younger officers haven't learned to know their men—to talk to them individually, and to be ready and available at all times. Give them help and advice freely."

About then Mary had the bridge table ready for our weekly game. For the time we had to leave the Corps in the Commandant's hands.

Just a reminder, Lieutenant. When you take over your first platoon, or whatever small unit or group you are fortunate to command—learn all you can about them. Know them by sight, certainly. And by name. But know them, too, by personality—by shoe size—by voice—by blood type. Yes, even know them by their feet. In combat your ability to lead, and maybe to live, will depend greatly on what you have learned and what you know about your men.

Battles are won by men. Know yours well! USMC

The Salty Skipper says the lieutenants carry a big load. He aims to pass on a few pointers. Send your ideas to him, care of the Gazette.



WHAT IT MEANS TO BE A MARINE

By MSgt C. V. Crumb, FMCR

☛ **LOOKING BACK IS EASY. LOOKING ahead is hard. And hardest of all is to look objectively at the present. So, more than 20 years after I first enlisted I think I have a better picture of what those years meant to me.**

What did it mean to me to serve two decades as a United States Marine?

What does it mean to those of you who are still serving?

What will it mean to you if you decide to make a career of it?

What Does It Mean To Be A Marine?

On recruiting posters and in recruiting pamphlets the Marine Corps used to offer travel, adventure and education as inducements to a probable enlistee. After you had enlisted these inducements were a standard joke around the barracks. Today, as I glance back, it is very easy for me to understand that the last part of this three-part inducement was not so much an inducement as it was a firm promise. I am not thinking of the formal side of education alone. I am thinking of the various and sundry places, jobs and duty assignments, as well as formal

schools, in which I took part as a career Marine. Service in the Marine Corps does guarantee an education.

As a student: Boot Camp in San Diego; small arms marksmanship training at a dozen places over most of the world; bayonet and other physical training in as many more places; First Sergeants School in Philadelphia; OCS and Reserve Officers School at Camp Lejeune and Quantico; Adjutants School on Saipan; Instructor Orientation at Norfolk.



As a teacher: Naval Academy Prep Training at Tsingtao, China; NROTC Instructor at Iowa State College; Instructor Orientation Course, Camp Pendleton Base NCO School; Chief Instructor, 2nd Infantry Training Regiment and 1st MarDiv NCO School.

As a lecturer: for high school groups, civic groups and educator groups in many areas throughout the US.

As a traveller: seven years in the Orient; six times across or over the Pacific and its islands; eight times across the US; service up and down both coasts and in the Midwest.

Student, teacher and traveller; proven ingredients for an all around education. Are the above circumstances unusual? Absolutely not. In fact they are commonplace compared to some others who served during my time and in a similar status.

Today, I work for a corporation international in scope. It's no wonder that I am able to establish a common meeting ground with the guy who sweeps the floor and also with the guy who makes top management decisions. To be a Marine means you have an education.

Service with the Marine Corps means you have learned the meaning of discipline. Many times we have heard the saying: "You can never be a leader until you have learned to be a follower" or "You cannot give orders intelligently until you have learned to take them." Many of the ills that befall people today come as a result of failure to accept discipline. To serve with discipline means to live an orderly life which is generally a happy one. Countless times I have heard remarks like this: "Yeah, Col So-and-so runs a tight command. But it's better once you get used to it." The road through life is lined with sign posts and regulations, all of which are, either directly or indirectly for our own safety, happiness and welfare. The first thing you learn in the Marine Corps is how to get along with regulations. Being a Marine means that you serve and live with discipline.

Service with the Marine Corps teaches you responsibility. Those who study the conduct of our American people often are apalled at the tendency of the young and old alike to shed responsibility. Men seek high pay positions but hesitate to accept the responsibility that goes with them. There is a tendency among some to violate the community laws and then blame others when they are apprehended and punished. The Marine Corps furnishes a sure, if sometimes slow, procedure of promotion for those who will accept responsibility for their own conduct

and the conduct of others. In every class in leadership, whether it be Junior Non-Com, Staff NCO, Company Grade Officer or Field Officer, sooner or later you will hear: "Authority can be delegated but responsibility, *never*." On this theme hangs the tight and strong command line of the Marine Corps from the Headquarters at Washington to the most distant parts of the globe.

Several years ago while talking to a young Marine sergeant who alone manned a recruiting sub-station in a remote corner of the United States, I remarked: "Sarge, you're shined, polished and pressed like you were about to take part in a parade at Quantico."

He fixed me with a serious eye and replied, "I'm all these people ever see of the Marine Corps. In this place I am responsible for its name and reputation."

Being a Marine means you have learned to accept responsibility.

In the Marine Corps you serve with confidence. During the golden era, 1898-1932, individuals and units of the Marine Corps established a combat record that made it an elite corps. In the late 30's there was a tendency by some to suggest that the Marine Corps was over-rated. Our entrance in WWII was accompanied by a series of humiliating defeats. The brave and very skillful defense of Wake Island by the Marines was one of the very few bright spots. The first ground offense in the Pacific area was the skimpily supported assault on the Solomon Islands by the





1st MarDiv. Almost at the outset, reports from the combat area headlined the confident way Marines went about their job of disposing of hitherto invincible little Jap fighters, amid the disease-infested jungles on a far away, unknown island. A few months later a well known writer, who had been there for a couple of days, analyzed this spirit of confidence in a national periodical. He explained that this spirit of confidence came from training and tradi-

tion; he said that each individual Marine, because of the fighting tradition of the Corps and the toughness of the training, was confident of his own ability and that of his buddies; therefore, he fought with discipline and steadfastness. He wrote further that in the real tough situations, when victory and/or survival became doubtful, Marines turned to the belief in themselves, their buddies and their units, and fought for one another, their unit, and the Ma-

rine Corps. This confidence in themselves and one another very often spelled the difference between victory and survival and defeat and annihilation.

Service with the Marine Corps means you serve with a team. Everything that the Marine Corps does is a team effort. Every unit from the Amphibious Landing Force down to the fire team is organized into a team—a group of highly select, well trained men all pointed to one objective. During the fight out from the frozen Chosin in 1950, a military observer watched with astonishment gunners from a Marine Artillery gun crew integrated with cooks, bakers, and clerks to form a rifle platoon under the command of a lieutenant from motor transport, function perfectly as part of a rifle company. Many times during the history-making fight out from the reservoir the success of the entire movement depended on the fighting ability of a single platoon or company. In many cases these units were made up of Marines and subordinate units that the day before were in another command. The success of the whole operation was possible only through the local successes of the small units. The small units were successful because the individual Marine is a team man, trained to handle himself in any situation and to subordi-



nate his own desires to the objectives of the team. Being a Marine means you are a member of the best military team there is.

Service with the Marine Corps means you serve with pride. Some years ago a master sergeant said: "Pride is still our pivot." When and if we can no longer truthfully make this statement, the Marine Corps will be just another outfit.

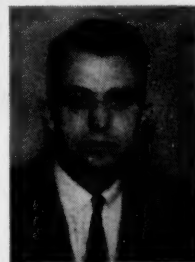
In somewhat bloodless but yet tension-packed assignments such as protection of the mails, 1921-26; guarding legations and concessions in the Orient 1898-1941; containing the Communists in North China in the late 40's; landings in Lebanon and in countless dozens of other places and on other occasions, Marines have deported themselves with the discipline and steadiness characteristic of veteran and trained troops.

With their blood and sweat, with musket, rifle, Gatling gun, machine gun, bayonet and grenade, Marines have carved for themselves an enviable reputation in the field of combat.

In 1918 after meeting the Marines in Belleau Wood, veteran German officers compared them in official dispatches to the fierce wild dogs of the Bavarian Alps: the name of which translated into English is "Devil Dog."

After watching the 2dMarDiv take Betio in the Tarawa Atoll in 1943, Robert Sherrod, now managing editor of the *Saturday Evening Post*, said: "I was not sorry to leave the appalling wreckage of Betio and its 5,000 dead. I was thankful that I had lived through the toughest job ever assigned to the toughest outfit the United States has produced, the magnificent US Marines."

MSgt Crumb has seen both sides of the fence: as a Marine for 20 years, and as a civilian since his retirement to the FMCR in 1956. He firmly believes that those intangibles that distinguish a Marine have been immeasurable assets in his civilian career. To this he adds: "The Marine Corps is still the best. It means a lot to be with the best if you realize it and do everything you can to keep it the best."



A very high ranking member of another branch of the service, after hearing the reports of the conduct of Marines in an operation late in WWII, said: "Uncommon valor was a common virtue."

A British military observer, while watching the Marine Brigade move against a Communist Division in a last ditch effort to save the Pusan perimeter, our last toe-hold in Korea, said: "They are faced with impossible odds, and I have no valid reason to substantiate it, but I have a feeling they will halt the enemy. I realize my expression of hope is

"These Marines have the swagger, confidence, and hardness that must have been in Stonewall Jackson's Army. . . ."

unsound, but these Marines have the swagger, confidence, and hardness that must have been in Stonewall Jackson's Army of the Shenandoah. They remind me of the Coldstreams at Dunkerque. Upon this thin line of reasoning, I cling to hope of victory."

A major general from another branch of the service said in a report on the Marines, "The safest place in Korea was right behind a platoon of Marines. Lord, how they could

fight. The Reds told us they were afraid to tangle with the Marines and avoided them whenever they could. It is utterly impossible for me to express in words my respect and admiration for the United States Marines."

Being a Marine means you serve with Pride. . . .

In summary I would like to relate the incident that prompted me to write this article. A couple of weeks ago I stopped at the gas station where I usually get my car serviced. I noticed the attendant was a new man—tall, neat, and courteous. Before leaving I ran into the proprietor, who knew me only as the owner of a six-year-old car with the troubles normally attendant in a car of that vintage. I remarked that he had another new man. This was his answer "Yeah, and it looks like this one will stay awhile. He seems to know what he is doing, he can take orders, he's dependable, he treats my customers with courtesy, takes an interest in the business and takes pride in doing a good job. He's a good man but then he should be, he just finished four years with the Marines."

At that moment I felt an urge to say, "Yeah, I know. I spent 20 years in that outfit myself." But right then I didn't care to share my pride with anyone.

USMC

"Here Lies Dan, Who Didn't Know . . ."

THE FOLLOWING STORY COMES FROM the Old West via the *Explosive Ordnance Disposal (EOD) News Letter*:

Dangerous Dan was sheriff of a gold-mining boom town in Colorado. He had a gal friend who worked in the Double Eagle Saloon. One day his faithful deputy, Chester, rushed into the jail and told him there was a shifty stranger, named Deadwood Dick, making love to his gal. Old Dan went down to the saloon with murder in his eye. Shifty Deadwood Dick saw him coming and ran out the back door. There was another stranger in the bar named Wild Bill. This Bill was as rough as a cob. Old Dan said to him, "Go for your gun, you Polecat." Bill did and promptly shot him between the running lights.

Reflect a moment on the fate of hapless Dangerous Dan. That tragedy of the Old West could happen today in our Marine EOD work. The moral is this: "It is easy to get killed if you don't know Dick."

AMSgt J. P. Driver



DAVID MONROE SHOUP

"For conspicuous gallantry . . . above and beyond the call of duty as Commanding Officer of all Marine Corps troops in action against enemy Japanese forces on Betio Island, Tarawa Atoll, Gilbert Islands, from 20 to 22 November, 1943. . . . Colonel Shoup fearlessly exposed himself to the terrific and relentless artillery, machine-gun and rifle fire from hostile shore emplacements. . . . By his brilliant leadership, daring tactics and selfless devotion to duty, Colonel Shoup was largely responsible for the final decisive defeat of the enemy . . ."

LEST WE FORGET

By LtCol F. M. Johnson

LOUIS HUGH WILSON, JR.

"For conspicuous gallantry . . . above and beyond the call of duty as Commanding Officer of a Rifle Company, attached to the Second Battalion, Ninth Marines, Third Marine Division, in action against enemy Japanese forces at Fonte Hill, Guam, 25-26 July 1944. . . . Major Wilson . . . repeatedly exposed himself to the merciless hail of shrapnel and bullets, dashing 50 yards into the open on one occasion to rescue a wounded Marine lying helplessly beyond the front lines. . . . His inspiring conduct . . . sustains and enhances the highest traditions of the . . . Naval Service."



WILLIAM EARL BARBER

"For conspicuous gallantry . . . above and beyond the call of duty as Commanding Officer of Company F, Second Battalion, Seventh Marines, First Marine Division (Reinforced), in action against enemy aggressor forces in Korea from 28 November to 2 December 1950. . . . Captain Barber . . . inspiring his men to supreme efforts . . . throughout five days and six nights of repeated onslaughts . . . accounted for . . . 1,000 enemy dead in this epic stand in bitter sub-zero weather. . . . His profound faith and courage . . . reflect the highest credit upon . . . the . . . Naval Service."



As we adjust, or attempt to adjust, ourselves to the complexities of the modern military machine, are we losing sight of our Marine Corps' greatest asset: combat leadership?

The administrative demands alone of this new machine are enormous—the IBMs and the data computers haven't solved this problem—and because of the problem's magnitude and importance, we find ourselves paying greater homage to the expert and perfectionist in this area. He who makes no mistakes or receives no "your-attention-is-directed-to" correspondence is more and more to be envied.

As we move more toward a push-button type of warfare, as we assimilate more and more electronic gadgets into our bag of tricks, and as our tactics and techniques become more complex, compliments go most frequently to the technician and to the administrator and the staffer.

Now, do not misunderstand. Administrative competence, technical ability, knowledge and superior understanding of our professional machinery are essentials—we would have no proper balance without them—but the importance attached to these essentials must not be exaggerated—certainly not to the extent that the importance of combat leadership tends to get subverted. This could easily happen, not necessarily by design but rather by circumstance, not by planned intent but by silent erosion. This would be disastrous, for combat leadership—



Three Medal of Honor winners talk at HQMC; l to r: Col R. G. Davis, Gregory Boyington, Col J. L. Smith

by combat leaders with guts and know-how—is the main spring of our military machinery. Technical excellence, administrative perfection and smooth staff performance will not alone suffice. Guts, knowledge and combat experience are also necessary.

Reflect on our Marine Corps traditions, our background, our records of unsurpassed service to our country. Of all the factors which have contributed to our success and to the enhancement of our collective reputation, greatest credit must go to the men who led us into our historic campaigns—to the combat leaders with guts and know-how. It was so in the past. It is safe to predict that it will be so in the future.

Certainly, one thing is sure in the future: the sum of our efforts, using all the new concepts and equipment, must equal success in combat. The vital ingredient, the one constant factor in an equation loaded with unknowns, is our experienced, battle-proven, combat leadership.

Three old saws express it well: "Experience is the best teacher." "Experience is the mother of wisdom." "There's no substitute for experience." In meeting the challenge of combat leadership, a man shoulders the heaviest responsibility possible. In doing so he develops character, proves his mettle, and accumulates a treasure of experience. As George Washington said many

years ago, "Experience is the surest standard by which to test."

We have always placed a high premium on experienced and battle-tested combat leadership—especially when the "chips were down." One interesting example of a premium paid for proven combat leadership comes from the Spanish-American War. After a 52-year-old captain named George F. Elliot led the charge up sheer Cuzco Hill near Guantanamo Bay and beat the Spaniards in the process, he was advanced three numbers on the lineal list for his "eminent and conspicuous conduct"—for his guts and know-how. This might seem insignificant today, but in the "old corps" of 1898, three numbers on the list made a lot of difference.

Actually, the Spanish-American War came along at a period in history when Marines had not been engaged in major war for 33 years. Yet the "old salts" were on board: all the field officers and some of the captains were Civil War veterans. LtCol Robert W. Huntington, senior "old-timer" at Guantanamo Bay, probably considered Elliot's feat at Cuzco Hill as "good experience for junior officers." And it was—Elliot later became the 10th Commandant of the Marine Corps.

Today we are fortunate. We have many leaders who developed their know-how (and proved their guts) in the crucibles of WWII and the Korean Campaign. These are the

"Old Breed" who set the example at Guadalcanal; these are the "follow me" types who pulled our heads out of the sand at Tarawa; these are the rugged individualists who pushed us through Iwo's volcanic ashes; these are the sturdy professionals who kept us intact at "Frozen Chosin"; these are the leaders on whom we can and will count heavily in the future. And there are many such. We now have the largest reservoir of battle-tested combat leadership in our history.

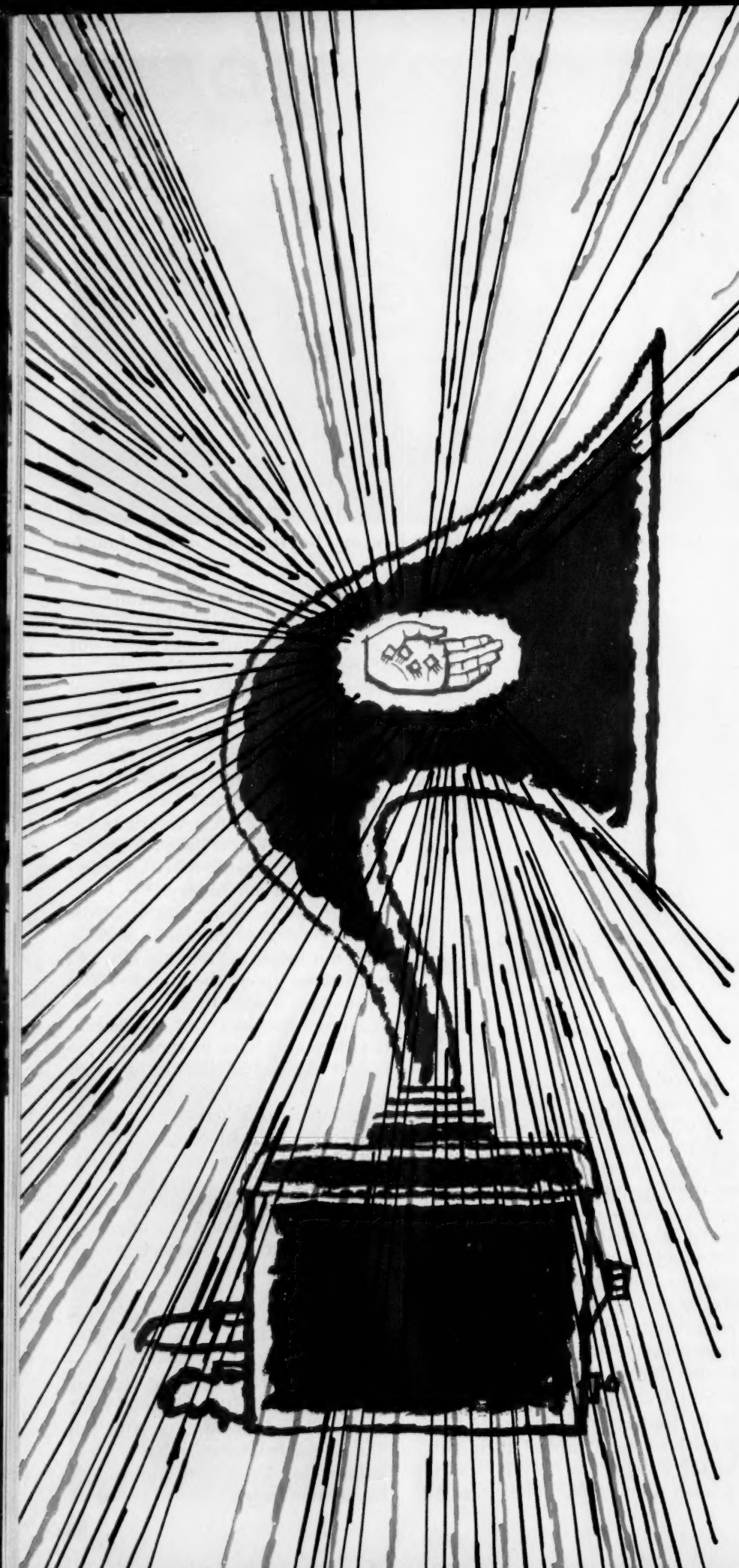
We must recognize this reservoir as our *greatest single asset*. And we must not forget it. We should try to learn more about these leaders and what has made them successful. Whatever qualities and characteristics they may have in common, the two at the top of the list are *guts* and *know-how*. With these a job gets done despite hell or high water, rain or sunshine, blood or bullets.

And, we do have many with these essential qualities and characteristics. To find examples one need only review a few citations. The qualities emerge from the formal language. Take, for example, those who have received Medals of Honor.

These are but a few of the many who are cut from more than common cloth, to whom we owe our greatest respect and admiration, who have and will carry our standards. These are but a few of our superb combat commanders.

These are but a few of our many. Let us not forget.

USMC



☛ It's GOT TO BE LIGHTER, SMALLER, and better to fit the concept.

This terse rule-of-thumb has been applied to Marine Corps items ranging from missiles to mess-kits in recent years as the Corps has pressed simultaneously to improve its combat mobility and to increase the effectiveness of its weapons and equipment.

Although many of the tactical and technological barriers have now been surmounted, there remain a number of problems. One such trouble spot lies in the field of communications and electronics.

The problem here, broadly speaking, rests in the necessity for expanding the range, functional uses, and overall scope of our field communications and electronics complex to provide for adequate control and support of widely dispersed ground combat units on the nuclear battlefield. Concurrently—and here's the rub—it is essential that the size and weight of this same equipment be reduced to meet the improved standards of mobility.

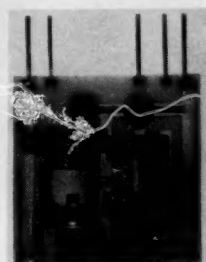
Despite the fact that considerable progress has been made along these lines of late—through procurement of modern, compact electronics equipment utilizing transistors, printed circuits, and other small parts—the problem has not yet been solved by any means.

Last March, however, the Department of Defense announced development by the Radio Corporation of America of a new electronic design technique that might prove one day to be the answer. RCA had succeeded in building for the US Army Signal Corps an experimental radio about the size of an ordinary sugar cube.

Announcement of this electronic

MICRO-ELECTRONICS FOR THE MODERN DOCTRINE

By Capt O. D. Newton



— 1/2 inch —
Micro Module Unit

break-through, as might be expected, created a mild ripple of headlines. Most of the accounts, however, focused attention on the novel size of the new radio and largely overlooked its real military importance. While it is true that the miniature receiver opens up a number of interesting possibilities for improvement of small-unit communications (you could almost stick one in the ear of every man in a rifle company, like a hearing aid), the device itself is not likely to add significantly to the art of military electronics.

Whether it does or not, though, the real importance of the minuscule radio lies, not in the radio *per se*, but in a new concept which made its small size possible. This concept, called "micro-modular construction," has proven capable in initial tests of achieving a 10-to-1 size reduction in many of the most modern types of electronics equipment in use by the armed services today—including, of course, the Marine Corps. In some instances, RCA engineers say, a 20-to-1 size reduction ratio is quite possible.

Obviously, if the new technique comes even half-way close to living up to its advance billing, a solution to the Marine Corps' communications and electronics mobility problem is on the horizon.

Adding to the attractiveness of the micro-module concept is this important consideration: many electronics engineers now feel that the miniaturization program, which got underway in earnest about 1950 with development of the transistor, has just about reached a point beyond which further compression is impracticable. By using the most modern production methods thus far developed, the electronics industry to-

day is capable of turning out equipment having a maximum parts density of 50,000 to 60,000 components per cubic foot.

At the same time, many authorities believe the current level of electronics miniaturization (i.e., 60,000 parts per cubic foot) is inadequate to meet the expanding requirements for electronics in nuclear war.

BGen E. F. Cook of the US Army Signal Corps puts it this way:

"A future war will accent speed and mobility . . . it will demand a substantial reduction in the bulk and weight of essential war material that must be moved in any tactical situation. This demand applies to field weapons systems, to communications centers, to surveillance electronics, and even to the electronic payload on our soldiers' backs.

"Consider, for example, our mobile operations centers . . . Van loads of electronics. . . . An inescapable mass

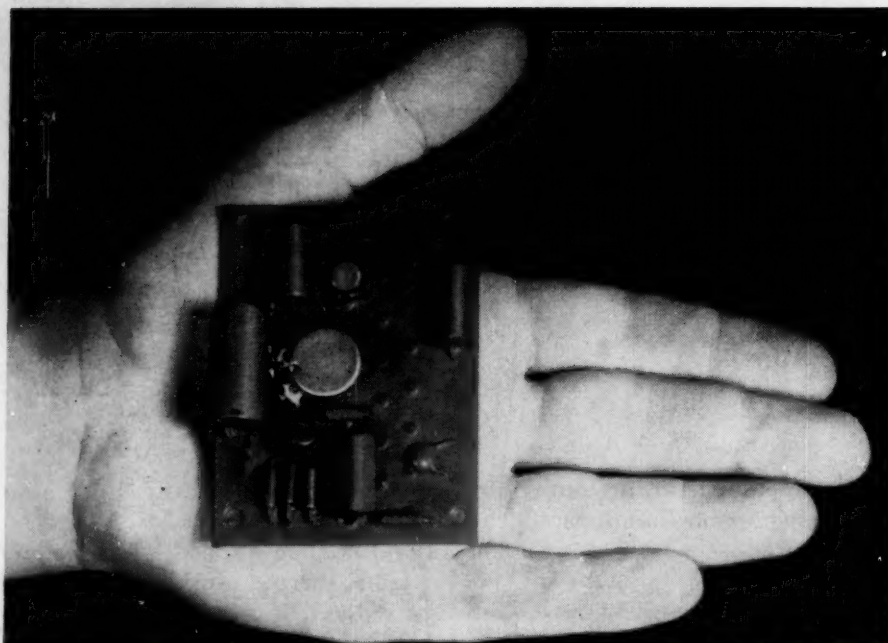
of electronics physically vulnerable to enemy detection and counteraction. For logistic as well as tactical reasons, this electronic complex *must* be reduced in size."

What he had to say goes double for the Marine Corps—in spades.

In any case, recognizing that future demands for further electronic miniaturization could not be met by extension of current production methods, the Department of the Army selected RCA in 1958 as lead contractor in a research and development program to crack the miniaturization barrier. In a very short time, by employing the micro-module approach and applying it in combination with existing miniaturization methods, RCA researchers succeeded in building experimental equipment having a practical parts density of 600,000 components per cubic foot. And this figure, of course, compared with the previous maxi-



Army scientists developed these five plastic wafers representing a major breakthrough in miniaturization. At top is a complete module.



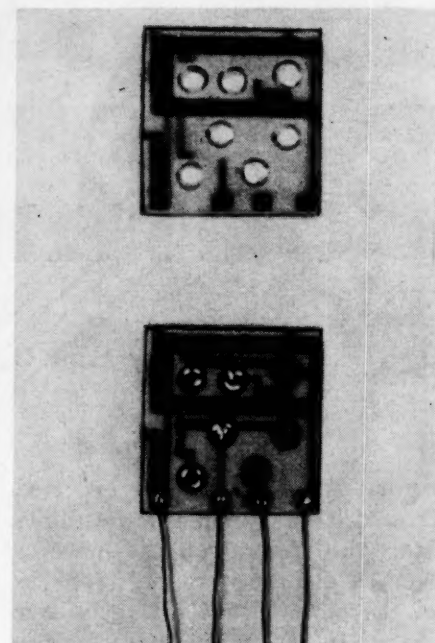
**Miniaturization as opposed to micro-miniaturization—
hand-size transistorized pre-amplifier by EXECUTONE**

mum density of 60,000 parts per cubic foot, accounts for the 10-to-1 size reduction ratio RCA engineers are now claiming.

While a detailed description of micro-modular construction would be far too technical for this article, an understanding of the basic principles of the concept is essential to proper evaluation of its significance for the Marine Corps. As simply as it can be put in general terms, this

is the way the technique works:

The basic units of a micro-module are tiny wafers only 1/100th of an inch thick and 1/3 of an inch square. The wafers are made of conducting, semi-conducting, or insulating materials. By controlled processing, the wafers are turned into micro-elements which have the ability to do the jobs of specific electronic circuits such as resistors, transistors, capacitors, diodes, and inductors.



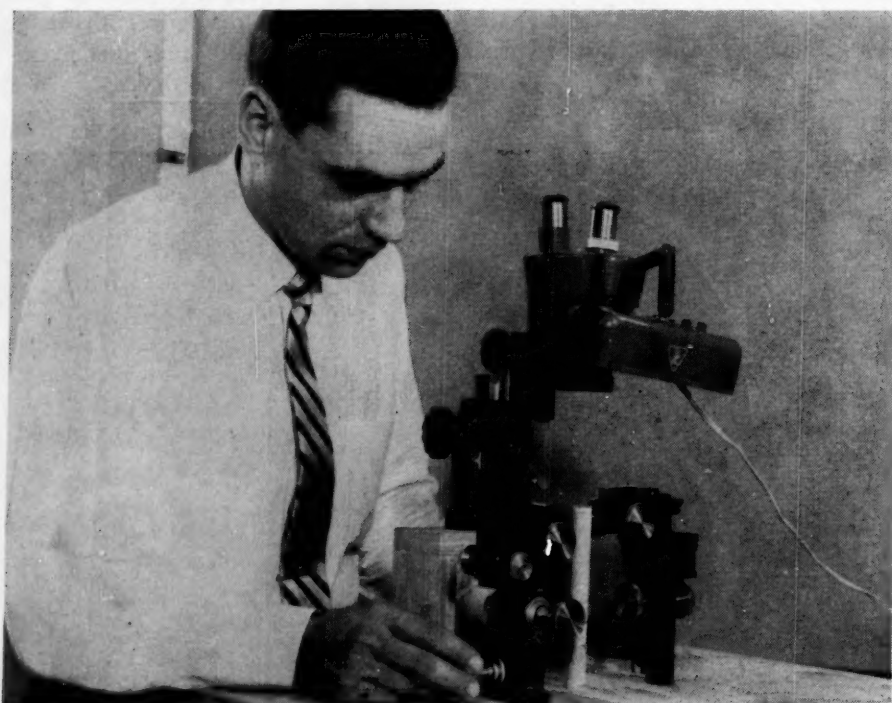
MELPAR's binary flip-flop combines 15 micro-miniature parts.

These micro-elements, which are all of uniform shape, are stacked together, inter-connected, and encased to form the micro-module itself. According to the combination of micro-elements which comprise it, the completed micro-module is then ready to function as an amplifier, oscillator, filter, or other complex electronic component. And the micro-modules, of course, can be combined to form a wide variety of electronic assemblies.

Although the main advantage of micro-modular construction lies in the degree of miniaturization it permits, the technique promises to pay other dividends as well. Because of their simplicity and monolithic shape, the micro-module cubes are said to be exceptionally rugged and efficient—extremely important in Marine Corps electronics equipment.

In the area of instrumentation for missiles, satellites, and modern aircraft, the applicability of the micro-module technique is both obvious and dramatic. Here, space is a consideration of crucial importance.

For the more down-to-earth requirements of the FMF, the possibilities of the micro-modular concept may be less glamorous but they're just as extensive. From any viewpoint, one thing is certain: there are few items of communications or electronics equipment in the Marine Corps today that would not serve



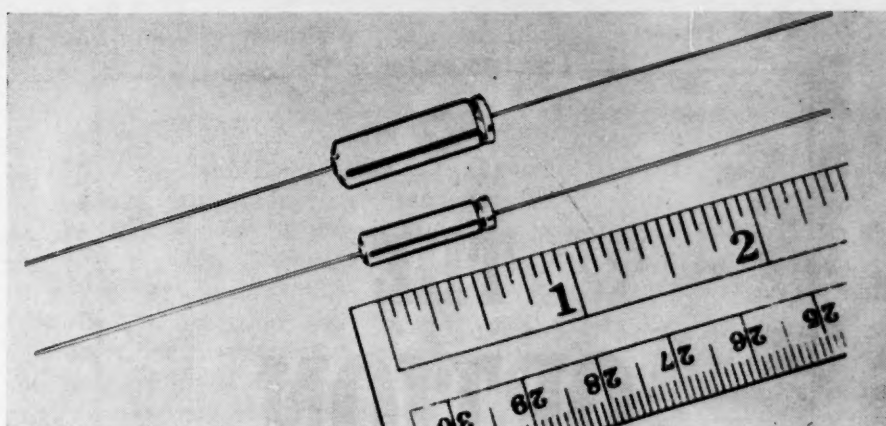
Positioning of the 15 micro-miniature components of MELPAR's electronic circuit requires a micro-manipulator in the hands of a physicist.

their purpose better if they were lighter and smaller.

Potentially, then, the micro-module concept is *the* answer to the Marine Corps' communications and electronics problem. At this stage of the game it appears that the new miniaturization technique, or one like it, should be used as soon as possible to produce modernized Marine Corps electronics equipment for all command echelons, from the lowest to the highest. Such a modernization program could start with the man-pack AN/PRC-10 and extend right up the line to include the ton after ton of bulky, complex, van-loaded communications and electronics gear required today at the Force, Division, and Wing levels.

Another interesting (but somehow frightening) potentiality of the micro-modular concept is that it could very well open the way for Marine Corps adoption of types of electronic equipment which cannot now be used in the FMF because of their size, weight, or complexity. The possibilities here are both endless and speculative, but one good example lies in the field of electronic data processing. Today's "business machines" of this type are too big, too heavy, and too susceptible to maintenance problems for practical use in the FMF under field conditions. Yet, from the standpoint of utility alone, there is little doubt that they could be used to good advantage for a number of administrative and supply functions. Significantly, the micro-module technique lends itself particularly well to miniaturization of data processing and computing equipment and there is every reason to believe that such machines will some day be sufficiently small, rugged, and reliable to meet FMF specifications.

But it's time to take off the rose-colored glasses. Despite the bright promise the micro-module concept



CORNELL-DUBILIER condenser for miniatures is a mighty mite.

now holds, it is still just that—a concept—and it will be a long time yet before any micro-modular equipment is picked up on the books of FMF Accountable Officers. Under terms of its present contract with the Army, RCA has mapped out a four-year R&D program in which its new miniaturization technique will be phased in gradually to embrace increasingly complex types of electronic assemblies.

From this brief "state of the art" report, it should be clear that considerable time must pass before the electronics industry is ready to mass-produce micro-modular equipment for quantity military consumption. Just when it will be ready is anybody's guess. Even RCA isn't making any flat predictions. A handy man with a crystal ball, though, might say sometime in the mid-1960's.

Meanwhile, of course, RCA doesn't have—and doesn't claim to have—any monopoly in the field of electronics miniaturization. Although the scope of this article does not permit discussion of the overall electronics miniaturization program, a notable example of the kind of work being done elsewhere in the industry lies in a recent achievement of Diamond Ordnance Fuze Laboratories of Washington, D.C. This

firm has developed a tiny radio transmitter the size of an eraser on a pencil. Used in ballistic studies, the device measures the temperature of an artillery shell in flight and radios the information back to ground receivers. Diamond Ordnance also has produced a microscopic electric light only slightly larger than a pinhead.

These and similar achievements by other firms make it plain beyond a reasonable doubt that the electronics industry today is on the threshold of a new miniaturization era comparable in scope to the one ushered in by the transistor in 1950. While the whole program is now in a relatively early stage of development, it is unquestionably only a matter of time until sub-miniature electronics equipment will be available for Marine Corps use.

Accordingly, it is not too early for our higher echelon planners and electronics experts to start thinking in terms of contributions that such equipment can make to our combat efficiency. Weapons, tactics, and techniques that are impractical today, because of communications or electronics limitations involved in their use, may be entirely feasible in the future with tomorrow's micro-electronics.

USMC

★ ★ ★ ★

Automatic Drive

☛ Cruisers began shelling our Midway AA position before the runner and the ammo truck made it back from Battalion. First in was the runner—helmet, gas mask, rifle, bayonet, and all. Second by a radiator cap was the truck. The driver stared. "Brownie, I thought I left you behind at the CP." "For a minute you did," the runner panted, "but I didn't have to shift gears."

A. A. Johnstone



THE OPTION ACT ELECT or DECLINE?

By Maj R. C. Lutz, USA

❖ WILL YOU PARTICIPATE IN THE Uniformed Services Contingency Option Act of 1953? If you are a career member of any of our Armed Forces, this is a question you must answer before you complete your 18th year of service for pay purposes. Failure to act in time will result in automatic ineligibility and may create serious financial hardships for your present or future dependents. Therefore, even bachelors should consider this piece of service legislation.

- How can this Act affect you and your dependents?

- Should you participate?

This article attempts to answer these questions in detail sufficient for all but the most unusual individual situation. The advantages and disadvantages of the Contingency Option Act (referred to hereafter as the "Act") and possible commercial substitutes will be discussed to permit you to decide with confidence and wisdom whether to participate or not.

Should You Participate?

If you have life insurance and retirement programs which cope adequately with any and all eventualities, you are both fortunate and rare. The Act is not for you. If, however, your programs are marginal in adequacy, or have serious gaps, the Act may prove to be an excellent selection.

A word about planning or programming.

Financial planning for the future is called estate planning. The basic feature in all estate planning is simple. During your peak earning years set aside something for your old age. In a word: save.

These savings take on many forms. We all know about the cookie jar type. Then there are savings accounts and savings and loan accounts. These types sweeten the pot by paying interest.

Perhaps the most common form of estate planning is life insurance. Insurance in all its forms and types is a complex field in itself and requires a separate article. For most of us, estate planning begins and ends with life insurance.

However, there are other increas-

ingly complex forms of estate planning. These too are merely other forms of savings. These include the well known US Government savings bonds, and the more risky (with increased interest or "yield") commercial bonds. Also real estate and stocks. Each of these forms of savings is a complete subject in itself.

You should consider them in your own estate planning. However, space does not permit comparison of the Act with anything other than insurance. To complete the picture, other service benefits will also be included.

The average serviceman's life insurance program is built around survivors' benefits provided by Social Security, and by Dependency and Indemnity Compensation which recently replaced the \$10,000 "free insurance." This program is then augmented by National Service Life Insurance, commercial insurance, and other savings as time and means

benefits. Reduced benefits would result should other minor children survive. The old age portion of Social Security will commence only when your widow turns 62.

Normally protection under Indemnity Compensation stops when you retire. Only if death is due to service-connected causes will this protection carry over into retirement. Therefore, your death any time between retirement (or your youngest child's 18th birthday) and your wife's 62d birthday is the worst case possible. Insurance or other estate savings will be the only source of income in this danger period. Purely from the protection standpoint, an in-service death or one occurring after your wife's 62d birthday is much better than one occurring in between these conditions.

Now couple the above considerations with these facts: Statistically women live longer than men. Also, most men marry women younger

augment old age Social Security benefits.

Incidentally, two couples, ages 43, 41; and 53, 51 will be used throughout the remainder of this discussion.

Hence, there is a financial danger period prior to your wife's 62d birthday. Should you successfully outlive this one, odds are very strong that another danger period will exist when she is in her 70s. In the first danger period you die too soon; in the second your wife lives too long.

In light of these thoughts, are there now any gaps or danger periods in your program? If so, the Act can be used as a gap filler. But what is the Act? And how does the Act compare with insurance? What about some of the bad features of the Act? These will be taken up in turn.

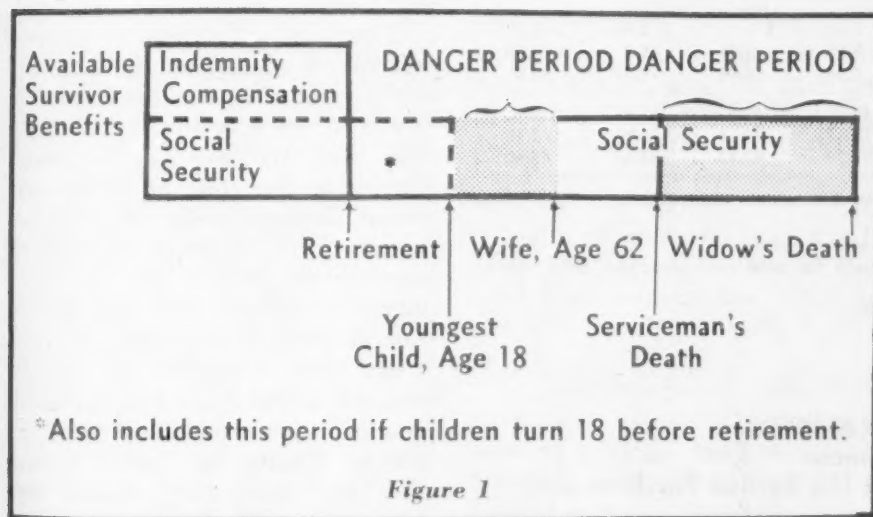
Provisions of the Act

The Act is voluntary. It is a modified form of insurance. The Act permits members of the uniformed services to receive a reduced amount of retired pay in return for a guarantee to continue paying a selected percentage of your retired pay to your wife and/or minor children should you die before they do. The specific amount of reduction in retired pay and specific amounts payable to your survivors are dependent on the following interrelated factors: Your age, and ages of your dependents at the time of your retirement; nature of your retirement, i.e., physical disability (PD); retirement rank; and the percentages and the beneficiaries you select.

Those eligible to be named beneficiaries are limited to your wife (the Act calls this Option 1), your minor children (Option 2), or your wife and your minor children (Option 3). Another option (Option 4), which does not relate to beneficiaries, will be mentioned later.

You may decide to protect an eighth, a fourth, or half of your reduced retired pay under any single option. A combination of the above three options is also permitted, but the total of the percentages must not exceed one half.

Cost is based on the options se-



permit. Certain dangers and potential gaps are inherent in this generalized program. They should be recognized and weighed as your individual situation warrants.

Figure 1 graphically shows potential "danger periods."

Until your wife reaches age 62, Social Security survivors' benefits are based on the existence of minor children. Therefore, a fatal illness or accident involving an only child would result in no Social Security

than themselves. For example, a husband who is 43 and whose wife is two years younger, based on present average life spans, can expect to live to 71.8 and 76.2 years respectively. Should they both still be living ten years later, their chances will have increased to 73.7 and 77.3 years. In other words, this wife can expect to outlive her husband by 5½ to 6½ years! Once again insurance will be necessary to replace her late husband's retired pay and

lected and those eligible beneficiaries living at the time of retirement. This cost is taken out of your retired pay. The balance is your "reduced retired pay."

No deductions will be made until you retire.

In the event of your death, one-eighth, one-quarter, or one-half of your reduced retired pay as selected in combination with your option selection will be paid until your widow's death or remarriage, or to your child or children in equal shares until the youngest is 18 years old.

No reserve or cash values accrue; therefore your payments are recoverable only upon your death and then in the form of payments to your beneficiaries. Should all your designated beneficiaries predecease you, pay deductions will continue unless



Maj Lutz wrote this article after looking in vain for a similar source of concise and complete information on the Option Act. It is particularly timely since the whole "hump" plus many SNCOs are nearing the 18-year deadline for action. The author is career Army (West Point, Class of '45). He is an artillery officer stationed at the US Army Artillery and Missile Sch, Ft. Sill.

you further elect Option 4. In other words, Option 4 protects you from continuing to pay for the protection of beneficiaries who die before you do. The merit of Option 4 is so obvious and so nominal in cost that it has been included in all future examples and discussion. Take it.

Examples of typical costs and benefits by rank are contained in

Figure 2. These are based on 20-year retirement pay rates. Figure 3 is based on 30-year retirement pay rates. Ages other than those shown will change cost and benefit figures, but a marked difference in age is necessary before these figures change significantly. Specific rate factors for most age relationships are available in NAVPERS 15867.

The above are the major provisions of the Act. In part it resembles available forms of commercial insurance and annuities. Certain restrictions and payment techniques are unique.

There is one final provision of utmost importance: How to change your original election. A "change" is defined as a revision of desired percentages (one-eighth, one-quarter, one-half), or of desired options (1, 2, 3, and 4), or a desire to withdraw from the Act completely. Beneficiaries at the time of retirement govern, changes in the named beneficiaries due to birth or death, and marriage or divorce are not considered as changes. You may signify your desire to change your election at any time. However, this change becomes effective only upon completion of five more years of active service. Should you retire before these five years have elapsed the change is *not* effective.

OPTION ACT EXAMPLES

20-Yr Retirement

Retirement Age, 43; Wife, 41 (1/4 Retired Pay Selection)

Retirement Rank	OPTION COMBINATIONS (See Note 1)					
	1 + 4 (Wife only) (See Note 2)		2 + 4 (Children only) (See Note 3)		3 + 4 (Wife and Children) (See Notes 2 and 3)	
	Non-PD	PD	Non-PD	PD	Non-PD	PD
Cost MSgt	\$ 8.47	\$14.34	\$ 0.63	\$ 1.91	\$ 8.45	\$14.33
Per Major	15.25	25.80	1.13	3.43	15.21	25.80
Month Lt Colonel	17.02	30.51	1.34	4.06	17.99	30.51
Death MSgt	41.63	40.22	43.59	43.52	41.64	40.42
Benefit Major	74.94	72.30	78.47	78.14	74.95	72.30
Per Month Lt Colonel	88.87	85.49	92.79	92.11	88.63	85.50

Note 1. Multiply (divide) cost and benefit figures by 2 to obtain approximate 1/2 (1/8) retired pay percentage figures.

Note 2. Benefit will be paid until remarriage or death of widow.

Note 3. Assumes youngest child, age 10. Benefit will be paid until youngest child reaches age 18.

Figure 2

OPTION ACT EXAMPLES

30-Yr Retirement

Retirement Age, 53; Wife, Age 51 (1/4 Retired Pay Selection)

Retirement Rank	OPTION COMBINATIONS					
	1 + 4 (Wife only)		2 + 4 (Children only)		3 + 4 (Wife and Children)	
	Non-PD	PD	Non-PD	PD	Non-PD	PD
Cost MSgt	\$18.19	\$28.35	\$2.72	\$ 4.82	\$18.07	\$28.22
Per Lt Colonel	38.72	60.35	6.05	10.70	40.05	62.48
Month Colonel	51.20	79.29	7.68	13.59	50.90	79.42
Death MSgt	61.22	58.56	64.95	64.42	61.11	58.57
Benefit Lt Colonel	130.01	124.60	143.80	142.64	135.30	129.44
Per Month Colonel	171.89	164.74	182.77	181.29	171.96	164.83

Note 1. Multiply (divide) cost and benefit figures by 2 to obtain approximate 1/2 (1/8) retired pay percentage figures.

Note 2. Benefit will be paid until remarriage or death of widow.

Note 3. Assumes youngest child, age 10. Benefit will be paid until youngest child reaches age 18.

Figure 3

Dollar Cost Comparisons

For comparison purposes the cost data contained in Figures 2 and 3 have been converted into costs of providing hypothetical benefits of \$100 per month for option combinations 1 + 4, 2 + 4, and 3 + 4. See Figure 4.

How much will insurance cost which would also provide \$100 per month? A direct comparison is not a simple matter. Nevertheless, conclusive comparisons are possible.

**OPTION ACT COSTS
PER \$100 PER MONTH COVERAGE**

OPTION	20-YR RETIREMENT Retirement Age, 43; Wife Age 41		30-YR RETIREMENT Retirement Age, 53; Wife Age 51	
	Non-Pd	PD	Non-Pd	PD
1+4	\$20.50	\$35.80	\$29.70	\$48.20
2+4 (See Note)	1.46	4.41	4.20	7.50
3+4 (See Note)	20.30	35.60	29.60	48.00

Note: Based on youngest child age 10.

Figure 4

**INSURANCE NECESSARY TO PROVIDE \$100
PER MONTH FOR WIDOW
(First Danger Period Only)**

	20-YR RETIREMENT Retirement Age, 43 Widow, Age 42	30-YR RETIREMENT Retirement Age, 53 Widow, Age 52
Number of Years in Danger Period	20	10
Total Insurance Required	\$19,000	\$10,650
Insurance Cost per Month, Acquired 10 Yrs prior to Retirement ORDINARY LIFE	\$33.06	\$26.41
Insurance Cost per Month, Acquired at Retirement 10 YR RENEWABLE TERM ORDINARY LIFE	\$19.19 47.12	\$22.15 40.06

Figure 5

To provide a comparison, assume death occurs under the "worst case." Recalling Figure 1, this will be immediately after retiring. In this case the entire first danger period must be covered. Figure 5 shows the amounts of insurance required and the premium costs necessary to provide \$100 per month for the full danger period. A representative commercial stock company has been used to show net costs without having to compensate for dividends paid by mutual companies.

Two different approaches are used in Figure 5. In the first approach additional ordinary life insurance is taken out 10 years before retirement to take advantage of lower premiums. Considering only non-PD rates, the Act wins hands down in the 20-year situation. This is due to the 20-year danger period.

This is the time children are normally in high school or college. In all probability the only reason you haven't already purchased more insurance is because you can't afford the additional expense at this time!

The second approach assumes you couldn't or didn't acquire additional

insurance while you were raising your family. At the time of retirement you now purchase insurance. This comparison is most valid for in this case the costs of both the Act and the insurance start upon retirement.

Again, considering only non-PD rates, the Act wins hands down against an ordinary life policy and competes successfully with term insurance.

No comparison has been shown for the Act's Option 2 + 4. The results of such an analysis compare favorably with those of Options 1 + 4 and 3 + 4 just discussed.

There are several further important points to consider other than the pure dollar costs just mentioned. On one hand the insurance will be exhausted or paid out at the end of the danger period. The Act continues payments until the death or remarriage of your widow, or until age 18 for the children. On the other hand if the insurance is paid as life income rather than the 20 or 10-year periods shown in Figure 5, the lifetime monthly income for your widow would shrink to \$69 and

\$46 respectively (based on "10 years certain" selection).

There is also the matter of forfeiture of costs of both term insurance and the Act as compared with the cash values of the ordinary life policy. In the case of term insurance and the Act you pay your money and continue to have full protection. In the ordinary life case you pay more money for the same initial protection but constantly reduce your pure risk protection by the exact amount of your ever-increasing reserve. This then is simply a matter of paying your money and taking your choice of poor alternatives.

Of perhaps the greatest importance in cost comparisons are PD rates in Figure 4. Up to this point these rates have been ignored. At retirement you may not be insurable at all. Even under non-PD retirement conditions your health may be such that you are insurable only at greatly increased rates. In this event, dollar costs are no longer that important. Neither, for that matter, are the Act's increased PD rates. The income tax relief from a 20 percent PD determination, assuming two exemptions, will cover the increase in cost over the non-PD rates.

Since the Act is a form of annuity, how does it compare in cost with a commercial annuity?

To purchase a commercial annuity for your 45-year-old wife which, from the time of purchase, would provide her a lifetime income of \$100 per month would cost you approximately \$24,590. This cost is based on a "no refund" annuity. That is to say, no refund of any portion of the cost in the event of your wife's early demise. This compares with the forfeiture of cost feature of the Act. To eliminate this no refund weakness and guarantee a return equal to the initial investment would cost an additional \$2,660. Not many of us have \$27,000 to use in this fashion.

These are single premium examples. Annuities are also available for which you pay monthly or annual premiums and decide later the amount and the starting date of the annuity. From the cost of these single premium examples you realize the cost of these other forms of annuities is also prohibitive.

It should now be apparent why the Act contains such restrictive pro-

visions as an early decision regarding participation, a 5-year waiting period to effect a change, limited beneficiary selection, and forfeiture of premiums. The Act is self supporting. Without cost-saving features such as these, the program would be beyond the means of the average serviceman just as are commercial annuities.

Other Considerations

By now it should be obvious that the Act does have merit. It also has drawbacks. These merits and drawbacks and how to make the most of them will now be considered.

The greatest single drawback of the Act is not related to any of its provisions. Adjusting from active duty pay with allowances to a fraction of your base pay *without* allowances is in itself a most difficult transition. It is not desirable to incur additional expenses at the very time you are experiencing the most sizable pay cut of your life.

The Act is not as versatile as life insurance, and is not a substitute for life insurance. The Act's timing considering pay deductions is especially poor, regardless of favorable cost comparisons. However, one alternative is to stop all insurance costs at retirement. This can be done by accepting paid up insurance on permanent policies. Then replace the lost insurance protection by an appropriate percentage of the Act.

What option should you select? In the 12-year interval between your initial selection and a 30-year retirement, children can die or be born, death or divorce can break up your marriage. Then what?

Remember, beneficiaries *at the time of your retirement* govern. Now re-examine Figure 4; especially Options 1 + 4 and 3 + 4. Notice these are nearly equal in cost. Therefore the best selection appears to be Option 3 + 4 because it is more flexible. Even the unmarried serviceman should choose this combination. If he is still single at the time of retirement he will have no living beneficiaries and therefore will not be covered by the Act at all. However, should he marry, have children of his own, or adopt children any time prior to retirement he will be considered as having selected Option 1 + 4 or 3 + 4 depending on the absence or presence of living minor

children. Of course this same flexibility applies to the married serviceman who selects Option 3 + 4.

The initial selection of the one-half factor will in most cases be dangerous. A sudden disability retirement is always a possibility. And with current "RIF" and "hump"



problem areas present in all services even your estimate of time of retirement and of anticipated retirement rank may not materialize as planned. An extreme example can best illustrate this danger.

Assume a major initially selects Option 3 + 4 with one-half pay percentage. He plans to retire at 30 years in the rank of not less than colonel. Instead he is retired as a major in his 20th year of service with a 50 percent disability. His desired plan and his actual plan are shown below:

	Desired Plan	Actual Plan
Gross retired pay	\$739	\$315
Income Tax	—103 (3 exempt'ns)	—
Cost, Option 3 + 4	— 95	—48
Protection under Option 3 + 4	(322)	(134)
NET RETIRED PAY	\$541	\$267

The major's net retired pay, even with 50 per cent of it tax free, is still less than one half the amount he had planned on. The major's problem has changed from that of protecting his dependents at some future time to that of maintaining an adequate income right now. Commercial life insurance firms recognize this problem by offering disability clauses.

A partial solution to this problem will be suggested later.

Now what about the problem of

having to wait five years before a change in option or percentage becomes effective? This is a very restrictive feature and, as shown in part in the extreme example, could result in serious hardship.

Again comparing the Act to life insurance, many people have found to their sorrow and financial loss that they had purchased a certain type of policy which they really didn't need. The policy itself probably wasn't bad. The policy just wasn't suited to their particular needs.

Likewise, certain of the Act's options and percentage selections, or even the Act itself, may not be suited to your needs. With a restriction of this magnitude it is imperative that you know whether you want or need the Act before you join it in the first place. In this respect if the presence of such a restriction can provoke a sound decision it is an asset rather than a drawback.

Most of the disadvantages of this five-year restriction can be removed by the selection of Option 3 + 4 as discussed, by prior planning, and by approaching your desired percentage in progressive steps.

Figure 6 (next page) shows graphically the coverage provided by one solution.

Initially select one-eighth. In this case the one quarter will be in force during years 25-28 to protect net retired pay in the event of early force out or non-selection to full colonel. The \$210 pay increase may deter-

mine whether you can afford the one-half rate or not.

Examine your own situation and make this 5-year clause work to avoid your own special problem areas.

Of course an increase in service pay rates or a promotion will increase your protection without a change in percentage factor.

Also, if you are planning on working after retirement, most firms have group insurance coverage available to their employees. Generally rates for group insurance are cheaper

than individual term insurance rates and do not require a physical examination.

Both these considerations tend to reduce the need for using the one-half percentage.

Conclusions

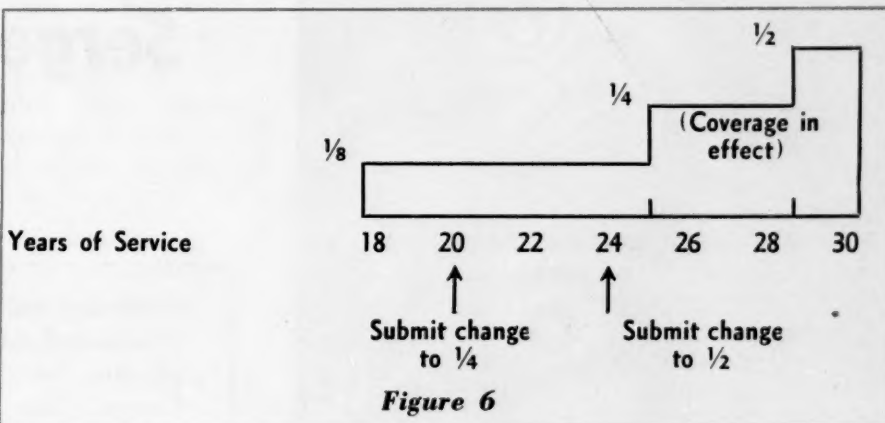
At this point you realize that the Uniformed Services Contingency Option Act of 1953 is a complex piece of voluntary and self-supporting service legislation. Congress has considered legislative changes to the Act including possible easing of the 5-year clause. Modifications did not occur during the past two sessions. Chances appear good for changes during the 86th Congress. The proposed changes are all favorable. They include: Reducing the five-year clause to three years; permit joining after 18th year of service; elimination of "death bed" applications. The latter item will prevent persons with serious retirement disabilities from joining the Act upon PD retirement prior to their 18th year of service. From this it can be assumed with reasonable certainty that any

future changes will enhance the good features of the Act or reduce present disadvantages.

The Act can have a terrific impact on your own financial security and

this earth, your decision would be easy to make.

No simple "yes" or "no" answer is possible. Your decision must be based on your personal needs and



on your family's security. On one hand it can reduce your net retired pay disastrously, or on the other can round out an otherwise marginal insurance program. If you could only glimpse into the future and learn the exact time and circumstances surrounding your departure from

on your present and projected family situation.

This discussion of the Act has been in sufficient detail that each serviceman should now be able to examine his own situation and arrive at a realistic and sound course of action. My summary is:

The following conclusions and observations concerning the Uniformed Services Contingency Option Act are now apparent:

- 1) It is not a substitute for life insurance.
- 2) It may or may not be desirable for you and depends on your personal situation. (Allow sufficient time before the 18th-year deadline to permit an exhaustive examination of both the Act and your own personal situation. The latter should as a minimum include your and your family's health, present and projected retirement and life insurance programs, your post-retirement employment plans, and the employment potential of your widow.)
- 3) It is an excellent means for augmenting insurance and other service and federal survivors' benefit. It compares favorably in cost with commercial forms of income perpetuation. This is especially true in cases where age and health considerations become significant.
- 4) Option 3 + 4 is the best option selection for most situations.
- 5) Selection of the one-half reduced retired pay percentage, especially initially, should be the exception rather than the rule.
- 6) Selection of the desired percentage is a "one time" decision for the 20-year man. The 30-year man should arrive as his desired percentage in successive steps.

US MC

Abreast of the Times

The Sergeant Major left the CO's office with a sigh of relief.

"I thought for a minute there," he said, "that I was going to get the colonel's count-down." A curious captain overhearing the remark asked the obvious: "What's the colonel's count-down, Sergeant Major?" In measured cadence came the answer. "E-9, E-8, E-7, E-6. . ."

Capt R. T. MacPherson



**Sergeant Major of the Marine Corps
Francis D. Rauber**

The Sergeant Major's Mail

Advising and informing staff non-commissioned officers is a major function of the Sergeant Major of the Marine Corps. The groups he can reach on inspection tours with the Commandant, and by personal correspondence, are limited. Accordingly, he has undertaken this monthly column. He accepts no payment. This month he discusses the subject of much of his monthly mail: enlisted assignment policies.

ON VISITS TO VARIOUS POSTS AND STATIONS OF THE Corps I find considerable misunderstanding of the enlisted assignment policies. My sole aim here is to acquaint Marines with some of the pertinent general policies that govern all permanent changes of station.

The Commandant of the Marine Corps has established certain policies for assignment of enlisted personnel. He has directed that they be administered in a fair and just manner to protect the best interests of the individual Marine as well as the Marine Corps.

Personnel strengths of all organizations are governed by either Tables of Organization or Manning Level Ceilings. It is the constant aim of Headquarters Marine Corps to maintain all units at their authorized strengths within the limitation of personnel availability.

Personnel are not detailed by "cards flying out of a machine" or "darts thrown against map boards." The careers of Sergeants (E-5) and above are monitored individually. The purpose is to make appropriate assignments which will provide as broad and varied a career as possible within the limitations of the individual's capabilities and the requirements of the Marine Corps. The Marine Corps is the only Armed Force which provides this service from the highest Headquarters level. Corporals (E-4) and below are normally transferred by quotas from field commands. However, when reported and transferred by name, they also receive the same personalized and individual scrutiny afforded our senior noncommissioned officers. In no case is an individual enlisted Marine assigned by name without his personnel file being thoroughly screened. With this

background in mind, the following are general policies considered to be of interest to every Marine:

(1) **CARDINAL RULE:** Permanent change of station orders can be directed only to satisfy a valid military requirement for a particular rank and skill. In the case of billets identified by Category "B" Military Occupational Specialties, any qualified individual with appropriate rank can be assigned regardless of his primary MOS. The "Needs of the Service" must necessarily override all other considerations.

(2) To meet personal desires—and to save money—so far as practicable personnel are assigned to activities in direction of their home of record or location of dependents. Personnel with home of record east of the



Mississippi River can generally expect to be assigned to East Coast Activities, those with home of record west of the Mississippi River can generally expect to be assigned to West Coast Activities. However, due to the greater density of civilian population in the northeastern section of the United States, personnel from the States of Ohio, Indiana, Illinois, Michigan, and Wisconsin are considered in the group west of the Mississippi.

(3) All assignments are viewed to provide as broad and varied a career pattern as possible. They must still maintain the individual's professional skill in a combat unit. Thus, assignments are rotated around performance of duty in the Fleet Marine Force.

(4) Except as established for specific type assignments, there are no "normal tours of duty." Definite tours have been established for personnel in the following areas:

- a. Overseas UnitsTours as prescribed in MCO 1300.8C
- b. Billets under cognizance of Dir of MCRRDThree years
- c. MARTCOMThree years
- d. NROTCThree years
- e. Drill InstructorsTwo years
- f. HQMCThree years
- g. Some Special Instructors Three years
- h. CWTCTwo years
- i. HMX-1Two years
- j. Special Liaison NCO'sThree years

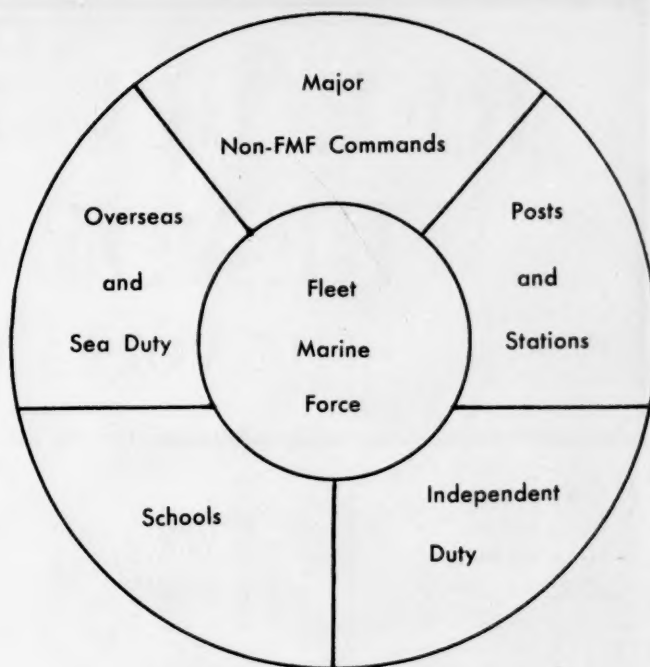
(5) It is considered that the exigencies of the service require that senior noncommissioned officers who have completed three years at a small post or station be transferred to the Fleet Marine Force or other appropriate assignment in order to maintain the individual's professional competence in a combat unit.

(6) Economy of personnel and funds require that, when practicable, vacant billets will be filled from sources in the same general geographical area. For example, the cost of transfer of one Gunnery Sergeant (E-7) with wife and two children from Camp Pendleton, Calif., to Camp Lejeune, N. C., averages approximately \$2,000.

(7) All Independent Type Duty billets require personnel of the highest caliber. Therefore, personnel whose records show recent convictions by civil courts or military court-martial, letters of indebtedness, substandard performance of duty or other derogatory information will not be considered for such assignments.

(8) It has been long recognized that one of the most arduous and exacting types of duty is that of a Drill Instructor. Accordingly, upon successful completion of such a tour of duty, every effort is made to accommodate requests for particular duty assignments.

(9) So far as Marine Corps requirements permit, every effort is made to assign personnel to the type duty and in the general geographical location desired as reflected by preference of duty indicated on fitness reports. In this connection, those noncommissioned



Assignments are rotated around duty in the Fleet Marine Force

officers who include at least one large major command among their preferences of duty will enjoy greater success than those who habitually request three duty stations such as Marine Barracks, Bermuda; Inspector and Instructor Staff, Denver, Colorado; or Naval Reserve Officer Training Corps Duty, University of Southern California.

(10) As a rule every attempt is made to provide commands with personnel of appropriate rank and skill as authorized; however, it is not always possible to do this. Accordingly, certain substitutes in rank are utilized as follows:

Sergeants Major	}	{	No substitution authorized. Will be assigned to billets so designated
First Sergeants			
Master Sergeants	&		Gunnery Sergeants
Gunnery Sergeants	&		Staff Sergeants
Staff Sergeants	&		Sergeants
Corporals	&		Sergeants
Lance Corporals	&		Privates First Class/Private

(11) Factors that must be considered prior to selecting an individual for assignment:

- a. Valid military requirement must exist for the services of the individual being considered.
- b. If on an established tour of duty, the individual must have completed such tour or otherwise have served an "economical" period of time in his present assignment.
- c. The individual's overseas control date dictates whether his assignment will be within the continental United States or otherwise.
- d. Individuals in stabilized units are not available for reassignment until completion of the mission for which the unit was stabilized. USMC

REPORT FROM THE READY FORCES

THE VOLUNTEER RESERVE

PART ONE

TRAINING FOR M-DAY

By Maj M. D. Cooke

Report from the Ready Forces begins this issue as a continuing feature designed to keep readers informed of major events in the US Marine Force-in-Readiness. Individual reports will cover all major training, both Regular and Reserve, Ground and Air. Each article is in two parts: a report of recent events and an analysis of progress in the drive to train and maintain truly combat-ready forces. Next month's Report from the Ready Forces will feature the 1stMarDiv.

☛ "THERE IS NO PRECEPT MORE VALUABLE to the Marine Corps than the one prescribing the vital importance of a readily available and highly qualified Reserve." So said the past Commandant of the Marine Corps, Gen R. McC. Pate in introducing the Marine Corps portion of the National Reserve Training Program to the House Armed Services Committee.

It is not surprising then, that the Corps, during the last fiscal year, was able to train its Volunteer Reserves better than it ever did in the past. This is a report of that training.

For the benefit of the reader who is not entirely familiar with the Marine Corps Reserve, perhaps a brief picture of the reserve structure and the organization for mobilization would be of some benefit at this point. Within the Marine Corps Reserve, there exist two training categories: The Volunteer or Non-drill Pay Reserve, sometimes re-

ferred to as Class III Reserve, and the Drill-pay or Organized Reserve, known as the Class II Reserve. Other than to mention that the Organized Reserve holds 48 paid drills a year, no further comment on it will be made here since it will be the subject of a separate article in the GAZETTE at a later date. The Volunteer Reserve was initially intended to provide a reservoir of former active duty personnel. This is by and large true today except for a small number of untrained reservists who have crept in from various sources. It takes no stretch of the imagination to see that it takes a major effort to keep the level of proficiency of this vast body of reservists from deteriorating as the years pass. To further complicate the picture, the organization for mobilization is superimposed on the Volunteer and Organized Reserve categories. Here again there are two categories: the Ready Reserve and the Standby Re-

serve. The Ready Reserve includes those reservists who are to be recalled during the first six months of a general mobilization. The present Ready Reserve ceiling as approved by the Department of Defense for the Marine Corps is 19,500 officers and 188,500 enlisted, totalling 208,000. The remainder of the Marine Corps Reserve constitutes the Standby Reserve and is unlimited in size. The Volunteer Reserve, upon which this article is focused, therefore consists of a portion of the Ready Reserve and the entire Standby Reserve, in all, approximately 14,835 officers and 250,576 enlisted as of 30 June 1959.

The mission of the Marine Corps Reserve is the basis for all reserve activity. Clearly and concisely stated, the mission is self-explanatory: "To provide a trained force of qualified commissioned, warrant and enlisted personnel to meet requirements for the initial expansion of the regular Marine Corps in time of war or na-



BGen Frederick E. Leek
Commander, Marine Air Reserve Training



BGen William T. Fairbourn
Director, Marine Corps Reserve

tional emergency." Obviously, training is the major task.

There are six categories of training open to the Volunteer reservist. Two, categorized as active duty training, are formal schools and on-the-job training. The remaining four, categorized as inactive duty training, are the Volunteer Training Unit Program, Associate Duty with the Organized Reserve, Appropriate Duty, and correspondence courses.

Each of the six categories is discussed separately in the following paragraphs.

Formal schools: It is into this category of Volunteer Reserve Training that the greatest proportion of the Volunteer Reserve funds are poured. This facet of volunteer reserve training provides the most valuable training that can be offered, mainly because of the high caliber of instruction presented. Obviously it's desirable for each reservist to attend a two-week formal school each year. This is precluded by lack of funds and the fact that many reservists aren't available. Most assignments are made to the Reserve Junior and Senior Courses conducted by Marine Corps Schools, Quantico, and Marine Corps Base, Camp Pendleton. These courses are capsule presentations of the nine-month resident junior and senior amphibious warfare courses offered

to active duty officers by the Marine Corps Schools. Each of the courses is presented in two two-week phases. During the year, groups of 381 and 299 ground and aviation officers attended the reserve junior and senior courses respectively. In addition several courses provided by the Land-



ing Force Training Units at Little Creek, Virginia, and Coronado, California, trained 123 ground and aviation officers during the year. Additionally, ten officers attended the Senior Reserve Officers course at the Naval War College, Newport, Rhode Island. The War College also provided about ten billets for majors at the Reserve Officers Command and Staff Course. Of particular significance, 13 field grade reserve officers attended the two-week National War

College Seminar at Ft. McNair, Washington, D. C., which presented a series of lectures on national strategy. Specialized formal schools training was afforded to another 113 aviation and ground officers and 126 enlisted through the medium of such formal courses as Escape, Evasion and Survival, Tactical Air Support, Communications, Ordnance, NCO Leadership and a miscellany of other courses presented by both the Army and Navy. All told, over 967 ground and aviation officers and 126 enlisted men were assigned 2-week active duty for training periods at formal schools during the year.

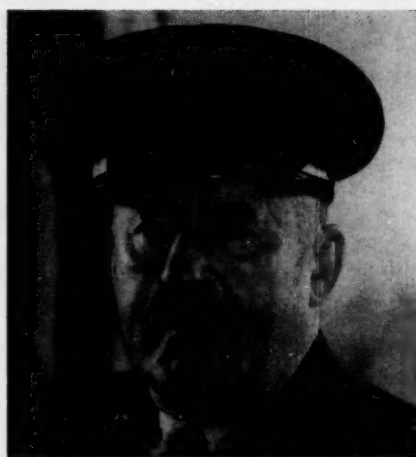
On-the-job training: This training has long been considered to be valuable in providing practical training to reservists who already possess a skill in a particular field. It also provides any number of specialists the only opportunity for maintaining their specialized skills. Of somewhat less value and effectiveness than the formal schools, this program received a lower priority for funds. During the year, 64 aviation officers and 43 ground enlisted volunteer reservists received training through on-the-job assignments at various Marine Corps activities.

One comparatively new aspect of this training was the initiation of a refresher program for Reserve pilots already qualified in FMF type heli-

copters and transports. The transport pilots are ordered to Cherry Point, and El Toro. The helicopter pilots are ordered to FMF HMR squadrons at New River and Santa Ana. It is expected that this program will periodically refresh the most qualified of the volunteer pilots.

Volunteer Training Unit program: Counterparts of the organized reserve units, volunteer training units provide the backbone of the volunteer training program year in and year out. During the past year, over 290 ground and aviation volunteer training units boasted of attendance by approximately 3700 officers and 345 enlisted. Each VTU is required to hold 24 meetings of at least two hours duration each year. No discussion of the program would be complete without a word of praise for the body of reservists who are responsible for the continued success of the VTU program. There is no monetary remuneration for the many hours devoted to attendance and the many more to preparation of instruction, which in most cases the members themselves conduct. As the subject is treated in more detail in another article in this issue, no more will be said here, except to mention that the scope of training is extended to cover a number of foreign languages and such specialized subjects as Engineering, Civil Affairs and Military Government, Intelligence, Law, Logistics, Guided Missiles and the like.

Associate Duty with the organized reserve: Current regulations author-



MajGen William W. Stickney
Former Director, Marine Corps
Reserve, now on inactive duty

ize volunteer reserves on Associate Duty to fill the difference between the manning level and T/O strength of organized reserve air and ground units. Those so assigned filled actual billets with the organizations and at-



tended the drills throughout the year just as did the members of the Organized Reserve, but without pay. They did not attend annual field training. During the past year, approximately 200 officers were being trained in an Associate Duty status.

Appropriate Duty: Of particular significance during this period of reduced funds, is the ever increasing activity known as Appropriate Duty. The most flexible of all of the categories, Appropriate Duty lets inactive reservists take part in a wide range of activities, with no pay, throughout the United States and overseas. Appropriate Duty takes no funds. It may be performed almost anywhere, at any time. During fiscal year 1959, untold numbers of reservists performed training periods, on their own, of two or more hours. These included: attending military instruction, assisting recruiting and officer procurement officers, assisting in public information, conducting specialized instruction for reserve organizations of all

the branches of the armed forces, observing field exercises, participating in parades or ceremonies. When examined closely, imagination is the only limitation to this program. Further, it lets every military establishment from the smallest detachment to the largest FMF command contribute to the vital task of maintaining this M-Day force-in-readiness.

Correspondence courses: As of the end of the year, over 550 officers and 1200 enlisted reservists were enrolled in extension courses provided by the Extension School, while approximately 720 officers and 3200 enlisted reservists were enrolled with the Marine Corps Institute.

Underlying the active duty training activities is a definite career guidance plan designed to lead officers through their 20 years of reserve service much as does the career guidance plan for regular officers.

Ideally, the reserve lieutenant, on release after his two years of active duty, begins a pattern of annual two-week active duty training assignments. These take him through progressive career and specialized formal schooling interspersed with on-the-job assignments in his occupational field until he completes the 20-year prerequisite for reserve retirement.

Priority for recall and probable assignment upon mobilization dominate assignments of individuals to active duty training. Those set for active duty during the first six months of mobilization (and to be assigned to a combat unit) get priority in active duty for training. The Department of Defense has banned assignment of Standby Reservists to active duty for training with pay and allowances. However, even so, many Standby Reservists volunteer for two-week periods of active duty training without pay and allowances in order to maintain their proficiency.

There is no true measure of the effectiveness of the Volunteer Reserve Program short of mobilization. However, the present program has undergone many changes since its inception. There is good reason to believe that it now supports a better force-in-readiness than it ever has before. Should the Volunteer Reserve be called upon to help defend our Nation, it will be ready and trained.

USMC



Col William M. Gilliam
Director, 1st MCRRD

REPORT FROM THE READY FORCES

PART TWO

PROGRAMS TO IMPROVE READINESS

By Capt F. M. Nelson and Capt J. A. Everett

THE ONLY TRUE MEASURE OF THE value of any military reserve is its ability to contribute to combat effectiveness. Realizing this, the Director, Marine Corps Reserve, and his staff have focused their sights on the objective of achieving and maintaining optimum readiness within the now familiar limitations on money and manpower. This is no simple task. The bulk of the reserve personnel budgets must go into the training of the drill-pay reserve, for it is from this source that reservists to augment the Fleet Marine Forces for their commitments immediately after M-day must be drawn. Numerically, however, there is no question but that the vast majority of total mobilization billets must be filled by Volunteer Reservists. The crux of the problem is this: How can the Volunteer Reserve keep its ranks healthy and virile when it has the lion's share of the mobilization mission but only a fraction of the train-

ing funds? It has long been apparent that nothing short of full exploitation of all resources will even approach an acceptable solution to this dilemma.

In general, three courses of action are producing the most tangible results. Screening has removed many Volunteer Reservists of low mobili-



zation potential from the manpower pool. To keep the pool filled with effective personnel, the Commandant has chosen to limit the input to six-month trainees and to personnel who have completed tours of active duty. Since the six-month trainees are required by law (under which they enlisted) to perform a six-month tour of active duty plus certain reserve requirements, the end result is that all incoming reservists are either trained or will become trained shortly thereafter. In effect, enforcement of the mandatory participation provisions of the reserve laws amounts to a screening of the input.

These programs of "screening out" and "screening in" have been evolutionary and effective. It is obvious, however, that this "honing down" process is not, in itself, sufficient to do the job. Something had to be done to keep the edge sharp once it was acquired. Since no additional training funds were likely to be forthcoming, it was necessary to take a close look at the possibilities for improving and expanding the non-pay programs already in existence. A nucleus of an effective train-

ing apparatus already existed in the form of the Volunteer Training Unit program, and it was decided to concentrate efforts toward making this program bear a larger share of the training mission of the Volunteer Reserve.

Thus, a third evolution got underway during late Fiscal Year 1959 to augment the already effective "screening out" and "screening in" programs. Since these three programs are the most far-reaching developments within the Volunteer Reserve in recent years, each will be treated more extensively in succeeding paragraphs.

Screening the Reserve

The quality of the manpower pool which comprises the Volunteer Reserve has fluctuated widely through the years. Prior to enactment of the Armed Forces Reserve Act of 1952, the Marine Corps Reserve was entirely a voluntary organization. No



Col Alfred L. Booth
Director, 4th MCRRD



Col John M. Davis
Director, 5th MCRRD

Advance M-Day Orders Planned

Obviously, the value of our Reserve must be measured in terms of its ability to produce trained Marines in emergencies. This poses monumental problems in administration and logistics. Plans are constantly being revised to keep pace with changing manpower requirements, technological advances and Reserve population centers.

A new development in the mobilization concepts in the USMCR is to plan new advance mobilization orders for VTU officers required early in mobilization. These orders will insure that each officer knows, well before a mobilization is announced, exactly how soon and where he is to go.

These orders demonstrate to the officer concerned that he is going to be involved in any future conflict and that training or preparation will help. Also, such orders show who should be trained. In these days of severely limited training funds, this is important.

Finally, such orders will help in matching the VTU training program with mobilization requirements.

enlisted Marine was automatically transferred to the Reserve upon release from active duty. In the officer structure, however, a reservist had always retained his commission until terminated by resignation, retirement, death or as a result of disciplinary action. This situation was responsible for the fact that the Volunteer Reserve officer structure mushroomed out of all proportion to its actual effective strength in the aftermaths of WWII and Korea. The enlisted Volunteer Reserve has never been a problem of such magnitude, primarily because most enlisted non-effectives do not reenlist at the end of their contracted or obligated service.



Col Alexander A. Vandegrift, Jr.
Director, 6th MCRRD

The Volunteer Reserve is made up of personnel who are in the Ready Reserve, the Standby Reserve, and those within the Standby Reserve who are assigned to the Inactive Status List. Although it was



conceived for a different purpose, this Inactive Status List became the repository for a large number of officers and a few enlisted reservists who were assigned to ISL status because of failure to earn 12 reserve retirement credits per year. For years, such assignment was an almost automatic process. The Inactive Status List swiftly grew into a faceless monster with a mobilization potential which was largely a matter of guesswork. Personnel who are assigned to the ISL do not compete for promotion and cannot earn reserve retirement credits. It seemed obvious that anyone who was willing to remain in that status for long, might be unable or unwilling to keep himself prepared for mobilization.

In 1957, HQMC took steps to restore the ISL to its intended role, which is to provide a temporary rest-

ing place for those reservists who possess needed skills, but who are unable to meet minimum participation requirements for a short time. All reservists on the Inactive Status List were required to follow one of four courses of action: a) elect restoration to an active reserve status and take immediate steps to perform the training required of active reservists (not to be confused with active duty), b) request discharge, c) elect retirement, if qualified, or d) establish eligibility for retention on the ISL by proving possession of an essential skill and by proving inability to perform training.

This cleanup action was not a one-shot affair. A policy for screening of the Ready Reserve has been in effect for several years. That program, coupled with the continuing, systematic screening of requests for assignment to the Inactive Status List should insure a vital and active Volunteer Reserve in the future.

The screening program has resulted in an overall attrition from reserve rolls of 10,185 officers since 1957. It is significant, however, that no reservist who possessed acceptable mobilization potential and who really wished to remain in the Marine Corps family, was required to elect retirement or discharge.

Enforcing Mandatory Participation

The Armed Forces Reserve Act of 1952 required a total of eight years of obligatory military service from date of initial enlistment, for all personnel enlisted or inducted into the regular or reserve components of the armed forces. This service could be all active duty or no active duty, or a combination of both. No provisions for enforcing participation in reserve training programs were included in the law as first enacted, but such provisions were written in through certain amendments passed on 9 August 1955. That date—9 August 1955—marked the birth of the six-month training program.

The amendments of August 1955 retained provisions for obligatory reserve membership, but the length of the obligation was shortened to six years for all new enlistees except six-month trainees. Initially, the Marine Corps Reserve's six-month program involved an eight-year mil-

itary obligation and was limited to those between the ages of 17-18½. In 1957, however, the Secretary of the Navy granted authority to enlist applicants between the ages of 18½-26 into the six-month program, and a six-year obligation was specified for reservists in this older category.

Since April 1957, the only input into the Marine Corps Reserve has been through the six-month program and through releases from active duty. This stringent policy has brought about a remarkable change in the mobilization readiness picture, for all enlistees who have no prior service must complete at least six months of active duty within 18 months of initial enlistment. In addition, the program has given the organized units unprecedented stability. Six-month trainees must continue to participate in reserve training after they return from their active duty tours. If they remain in an organized unit, they must attend at least 90 per cent of scheduled drills, and they must attend annual field training each year.

Six-month trainees who subsequently transfer from an organized unit to the Volunteer Reserve may be required to accept assignment to active duty for training for up to 30 days each year. While six-month trainees comprise only a small percentage of the Volunteer Reserve, the program has nevertheless had a salutary effect on that segment of the Reserve Program. It has eliminated the necessity to assign personnel to the Volunteer Reserve who are not willing to perform active duty and participate in reserve training for a total of at least six to eight years.

The August 1955 amendments to the Armed Forces Reserve Act also provided stiff measures for enforcement of reserve training requirements. This was done by authorizing involuntary active duty for training tours of up to 45 days for those who fail to participate satisfactorily. Another enforcement provision has been added by authorizing reduction in rank for the few who do not live up to their end of the enlistment contract.

Volunteer Training Units

The Volunteer Training Unit program has been in existence in

VTU BREAKDOWN BY TYPE UNIT					
District	General Units	Specialist Units	Marksmanship Units	Research Units	Total
1st MCRRD	36	9	4	0	49
4th MCRRD	18	4	1	0	23
5th MCRRD	5	20	1	0	26
6th MCRRD	0	30	0	0	30
8th MCRRD	24	4	2	1	31
9th MCRRD	26	4	2	0	32
12th MCRRD	52	11	6	0	69
14th MCRRD	0	1	0	0	1
Total	161	83	16	1	261

LANGUAGE UNITS (included in breakdown above)

VTU 1-39 Turkish	VTU 5-10 French
VTU 1-41 Arabic	VTU 5-27 Russian
VTU 1-43 Turkish	VTU 6-6 Russian
VTU 4-18 Russian	VTU 6-17 Russian
VTU 4-22 Russian	VTU 12-39 Russian
	VTU 12-62 Russian

AVIATION UNITS (not included in breakdown above)

1st MCRRD	5th MCRRD	6th MCRRD	8th MCRRD	9th MCRRD	12th MCRRD
AVN-1	AVN-13	AVN-12	AVN-3	AVN-6	AVN-2
AVN-11		AVN-22	AVN-4	AVN-14	AVN-5
AVN-15			AVN-9	AVN-17	AVN-7
			AVN-19	AVN-20	AVN-8
				AVN-21	AVN-10
					AVN-16
					AVN-18

one form or another for several years. It was conceived and established shortly after WWII by the then Director, Marine Corps Reserve, Col R. McC. Pate. The program was designed to provide unit training at a minimum of expense for those reservists who, by virtue of rank or geographical location, are unable to join a drill-pay unit. The VTUs helped to fill the needs of the period between WWII and Korea, and many units continued their training activities at home through the duration of the Korean conflict.

In the years after mobilization for the Korean hostilities, the VTU program continued to grow in number of units and in total membership. Because it is strictly a non-pay program, the membership is largely made up of officers of long service, although nearly 300 dedicated staff noncommissioned officers and enlisted personnel are on the rolls.

While effective in many respects, the VTU program had several inherent weaknesses. One of these was its inability to attract and retain junior reserve officers. Another was the purely administrative and logis-

tical difficulty of providing guidance and direction through up-to-date training materials. Close supervision of almost 300 widely scattered units was and still is an impossible task.

In the spring of 1959, MajGen Alan Shapley, then well into his second year as Director, Marine Corps



Col John R. Lirette
Director, 8th MCRRD



Col Orin C. Bjornsrud
Director, 9th MCRRD



Col Wilmer E. Barnes
Director, 12th MCRRD



Col Wallace M. Nelson
Director, 14th MCRRD

Reserve, convened a board to explore possible avenues to expand and improve the VTU program. The membership of the board came from HQMC and Reserve and Recruitment District staffs, plus a half-dozen commanding officers of successful Volunteer Training Units. As a result of some twenty-odd specific recommendations by this VTU board, the first major changes in the program since its inception were put into effect. Some of these are:

1) Membership in the Ready Reserve is now a general requirement. The only VTU members who are Standby Reservists are those who are not allowed to stay on the Ready Reserve roster because of over-age in grade or physical disability. This Ready Reserve requirement ensures that most VTU members will be available for mobilization if needed. It has also served to increase the number of officers on the Ready Reserve rolls, and it has emphasized the fact that the VTU program is one of several training media aimed at preparation for active service.

2) General-type VTUs were eliminated, and each unit was required to select a specialty in which to train. Each unit was given a specific mission and general training goals designed to achieve that mission.

3) Membership in more than one VTU by an individual is not permitted. This restriction is an adjunct to the unit specialization requirements. It ensures a concentration of effort in just one direction, and also helps to generate esprit through identification with only one unit.

4) Units are required to hold at least 24 training sessions per year. The old requirement was just half that number.

5) Units are now required to select at least 50 per cent of their training from a *Training Material Index* which is prepared to meet their specific needs. The materials in this index are extracted directly from current resident Marine Corps Schools curricula. The purpose of this requirement is twofold: It ensures a certain degree of cohesion

and uniformity in the training programs of all units, and it makes available the very latest information on Marine Corps tactics, techniques and doctrines.

To reinforce the above changes in the mechanics of the VTU program, there has been a resolution among those who are responsible for the direction of the reserve establishment to regard the VTU as a little less of a stepchild and a little more of a vital ingredient in the overall mobilization training complex. One cannot succeed without the other.

It is a bit early yet to assess the results of the changes of the past year, but bits of evidence of an evolution into something bigger and better are already beginning to appear. If the productivity of the Volunteer Training Unit program meets expectations — and there are no valid reasons why it should not — then the day should not be too far distant when the Volunteer Reserve will take its place shoulder-to-shoulder with the Organized Reserve in the mobilization readiness picture.

USMC

UFO

A MARINE CAPTAIN COMMANDING a detachment aboard a US ship anchored in a Mediterranean port was invited to a guest night aboard another ship. For the occasion he wore full evening dress, including boat cloak. It was early morning after a well-toasted evening when he returned, still very elegant but flying high. A newly joined ensign standing OOD challenged him.

"Don't you know who I am, Mister?" he demanded, sweeping open his cloak to reveal his uniform and rows of miniature medals.

Though obviously impressed with the strange figure before him, the ensign only shook his head. "Sir, I not only don't know *who* you are, I don't even know *what* you are."

1stLt J. K. McDonald

Marine Corps Gazette • January 1960

A Challenge!



The officers, active duty and inactive duty, of the Marine Air Reserve Training Command CHALLENGE the officers of all other components of the United States Marine Corps, regular or reserve, ground or aviation, to EQUAL or SURPASS their record of membership in the Marine Corps Association.

In the past four months the officer membership of this command has increased from 5% to 71%. Of an on-board strength of 1907 officers, 1351 now are members of the Marine Corps Association. In addition to H&HS, MARTCOM, all 17 MARTD's and 43 of the 85 organized aviation reserve units are 100%. THIS was accomplished NOT in 120 days BUT in the 4 drill weekends which constitute 4 months in the aviation reserve program; and some units have just started their drives.

In the spirit of fair competition, MARTCOM is willing to share its training aids with all who desire to accept this CHALLENGE. These training aids are:

(1) The appreciation by each individual Marine officer that he owes a loyalty to the Commandant and to the Corps of which he is a member. This loyalty should at least equal that extended to alumni and athletic associations, fraternal and social clubs.

(2) The assumption that all Marine officers are sincerely desirous of improving their professional knowledge and value. The Marine Corps Gazette, readily available to all, is the established vehicle for keeping abreast of the latest developments, concepts and techniques, and for the mutual interchange of ideas.

(3) The realization that we only get out of something what we put into it. Most of us, on 10 November of each year, heartily endorse the opportunity to proclaim our accomplishments and our pride in being Marines. Do we, during the remaining 364 days of the year, as ostentatiously support the organization which gives us our current sustenance and future opportunities? Is our pride a positive, living, daily assertion or a shallow ephemera which can be aroused once annually from its apathy as an excuse for a celebration?

(4) The knowledge that today, in practically all walks of life, the privilege of engaging in your chosen occupation entails the responsibility or necessity of belonging to some organization. Labor has its unions; business has its associations; and the professions have their societies. The military is the oldest of the honorable professions. Amongst the military, the Marine Corps is the proudest. Our professional society is the Marine Corps Association.

(5) The satisfaction of dignifying your library by displaying your professional magazine alongside your mounting collection of True, Field and Stream, and Playboy.

(6) The assurance that by "belonging" you have attained the stature of the Marine that, heretofore, you thought you were.

Accepting this CHALLENGE requires a self-denial. The price -- ONE warm beer a month.

A stylized, handwritten signature in dark ink, appearing to read 'F. E. Leek'.

F. E. LEEK
Brigadier General, U. S. Marine Corps.
Commander, Marine Air Reserve Training



Machine Help For Your Paperwork

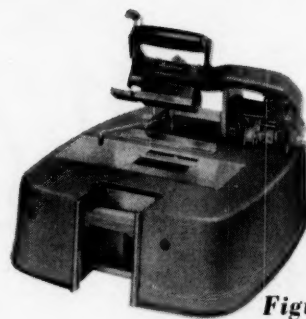


Figure 2

By LtCol J. G. Juett and LtCol R. M. MacAskill

THE FEW SQUARE FEET OF AREA occupied by the unit office is important space to any Marine. It matters not whether this space be in the barracks, pyramidal tent, sand-bagged bunker, the hold of a troop transport, the hood of a jeep, or in the pocket of the First Sergeant. The space for small unit ad-

ministration is the nerve center and the heartbeat of the world of the average Marine. This is where his records are kept; where he gets paid; where he receives his chow pass, his liberty chit and his mail; this is where good and bad news emanates; this is the source of his promotions and discipline; this is where his

questions are answered or unanswered. Although he probably doesn't identify it as such, the unit office is "career management" to him. All great decisions are made in the company office.

The company office has changed very little over the years. If 1stSgts Dan Daly or John Quick could suddenly return, they would easily recognize it. They would see the alphabetical formation of men—the numerous repetitive listings of such things as name, rank and service number typed by an 03 private with his right index finger.

The Marine Corps is a combat-ready force, available for instantaneous deployment throughout the world. Many small actions add up to this combat readiness. But dig to the roots of each action and you will invariably find that the small unit's ability to move quickly to implement a plan depends on how fast it can do the basic paperwork. Some wise observer once said, "If you want to see how good a military outfit is, see how well it moves." A key to combat readiness, then, is small unit administrative readiness. It rates emphasis.

Small unit administration is a burden at best. There is no way to avoid paperwork, but we can simplify and improve the methods. Primary emphasis must go to minimizing the workload in small units. Next, priority should go to improving administration left at the small

EPD	TAD	Qualified Driver	Leave	Security Clearance	Have not Fired	Mess Duty	Sick, Confined, etc.	COMRATS	EAS 45 Days or Less	Dependents on Station	Unqualified Swimmer
A	B	C	1	2	3						
KLOCKENBRINK WILLIAM A						AGSGT					
1234567/0369/8511/4135						E7 C1					
PEBD16MAY40 EAS12JUN61						TD19MAY60					
DOR15AUG57 GCT128 HS3						DOB13JAN21					
KLOCKENBRINK WILLIAM A						AGSGT					
1234567/0369/8511/4135						E7 C1					
PEBD16MAY40 EAS12JUN61						TD19MAY60					
DOR15AUG57 GCT128 HS3						DOB13JAN21					
WIDP2DC D/AUS10FEB53						112112 6YRRC					
RELP BTAB CDL49						SD4					

1. Name
2. MOS
3. Service Number
4. Expiration of Active Service
5. Pay Entry Base Date
6. Date of Rank
7. General Classification Test

8. Dependents
9. Departure-Arrival U.S.
10. Religion
11. Blood Type
12. Contract Duty Limitation
13. Rank
14. Pay Grade

15. Component
16. Tour Date
17. Date of Birth
18. Race
19. Enlistment Contract
20. PULHES
21. Special Designation
22. Education

Figure 1

unit level. This article deals with the latter. (Admittedly, the first is no dead issue.)

Why must we improve small unit administration? Because the administrative burden on the small unit has been mushrooming. For example, use of punch card personnel records doubles the data to be reported. More people want more information faster. While reporting it will be a headache, the greater burden is to keep data current. It must come from the small unit.

Increasing information to be reported, without improving the means of gathering, recording and reproducing this information, inevitably takes more man-hours. With this in mind, a study began at HQMC in August 1958 to find ways to improve. The recent use by private industry of embossed plates (*charge-a-plates* and *credit cards*) to save paperwork was noted. Could these time savers help Marine Corps administration to:

- 1) Increase combat readiness;
- 2) Simplify and expedite administration;
- 3) Decrease the small-unit burden;
- 4) Reduce administrators; and
- 5) Standardize reporting procedures to help automatic data processing?

The study had two phases—first, finding areas where embossing techniques would help, and second, field testing the equipment. In the first phase, major field commands proposed uses. During the second phase, some uses were tested by the 2dMarDiv. The field test fell to the 1stBn, 2d Marines during maneuvers in Puerto Rico. It proved that the equipment was portable, rugged, simple to maintain and would operate under field conditions.

From the study a concept of employment has been developed. The concept calls for two different types of embossed plates, plus equipment the using level needs to prepare, keep current and to make copies from these plates. One plate is maintained by the administrative unit and the other carried by each Marine.

Each plate has its own uses. The unit plate (Fig. 1) is larger and carries more information than the individual plate. The unit plate can

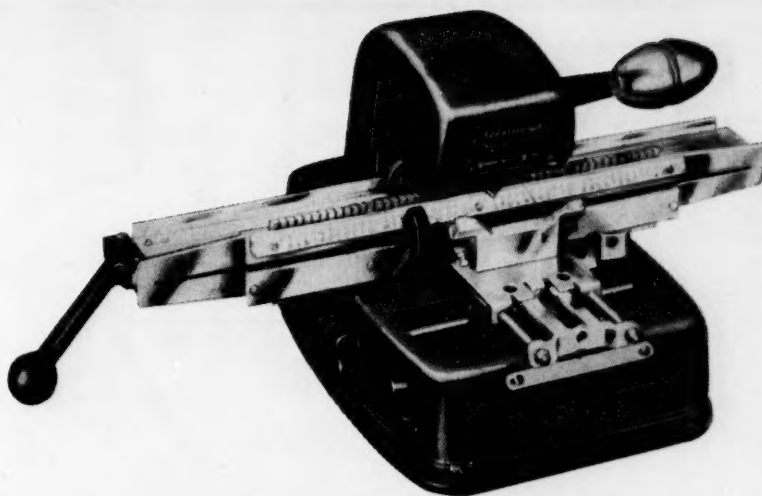


Figure 3

be embossed with 198 characters of information (six lines of 33 letters or numerals per line). By abbreviating or coding, much information on personnel or equipment can be recorded.

The imprinter (Fig. 2) adjusts to print only selected information from the plate. It repeats print, space prints, or prints in sequence. Plates are embossed with the hand Graphotype (Fig. 3) at the rate of about one plate every three minutes. Using the same machine, plates may be updated or corrected as many as four or five times. Removable metal insert tabs on the frame of each plate help maintain variable status information. Plates are filed and stored in a compact chest (Fig. 4).

The individual plate (Fig. 5) replaces one of the two current identification tags. The individual plate will be a laminated insert encased in a stainless steel plate. The insert will have the Marine's photograph, height scale, finger print, authentication and other identifying data. The steel plate will be embossed with the information prescribed by the Geneva Convention. Thus it can produce an embossed impression using the single imprinter (Fig. 6).

Uses for the unit plate include:

- 1) Entering standard identifying information on personnel action and other forms.
- 2) Preparing repetitive-type remarks and endorsements.
- 3) Preparing and maintaining service records, officer qualification records and health records.
- 4) Preparing rosters, manifests and listings.

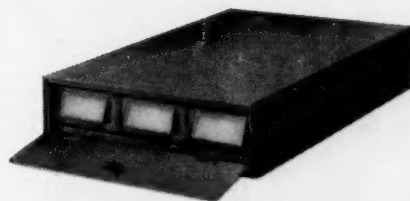


Figure 4

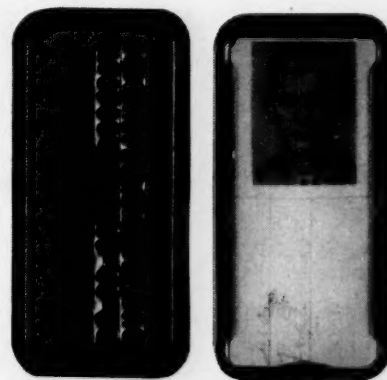


Figure 5



Figure 6

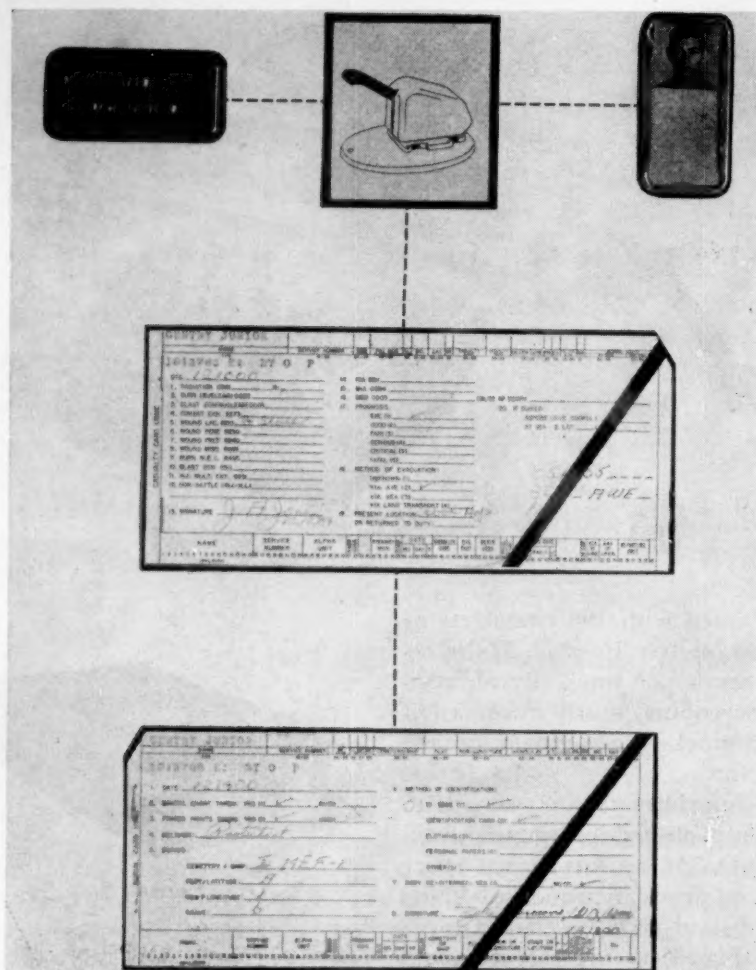


Figure 7

5) Preparing various labels and tags (e.g., bunk, wall and foot locker tags, equipment tags).

6) Preparing identification and locator files.

7) Entering status records on major items of equipment.

The equipment for a small tactical unit, with forms, paper and stencils, fits into two standard Marine Corps field chests. It will print legibly on stencil and hectograph mats and through five carbons. It is light, portable, hand-operated (requires no electricity) and simple to operate. Maintenance is neither complicated nor excessive.

The individual plate helps solve combat casualty reporting and accounting. At casualty receiving or control points, the individual plate prints a casualty or burial card (Fig. 7). When the casualty status changes, another card report is submitted. Reports go to the Combat Casualty Reporting Center (Fig. 8). There, consolidated casualty reports are prepared, and summarized status information is furnished for staff action.

The chart (Fig. 9) shows a comparison of time required for administrative tasks with and without embossing equipment.

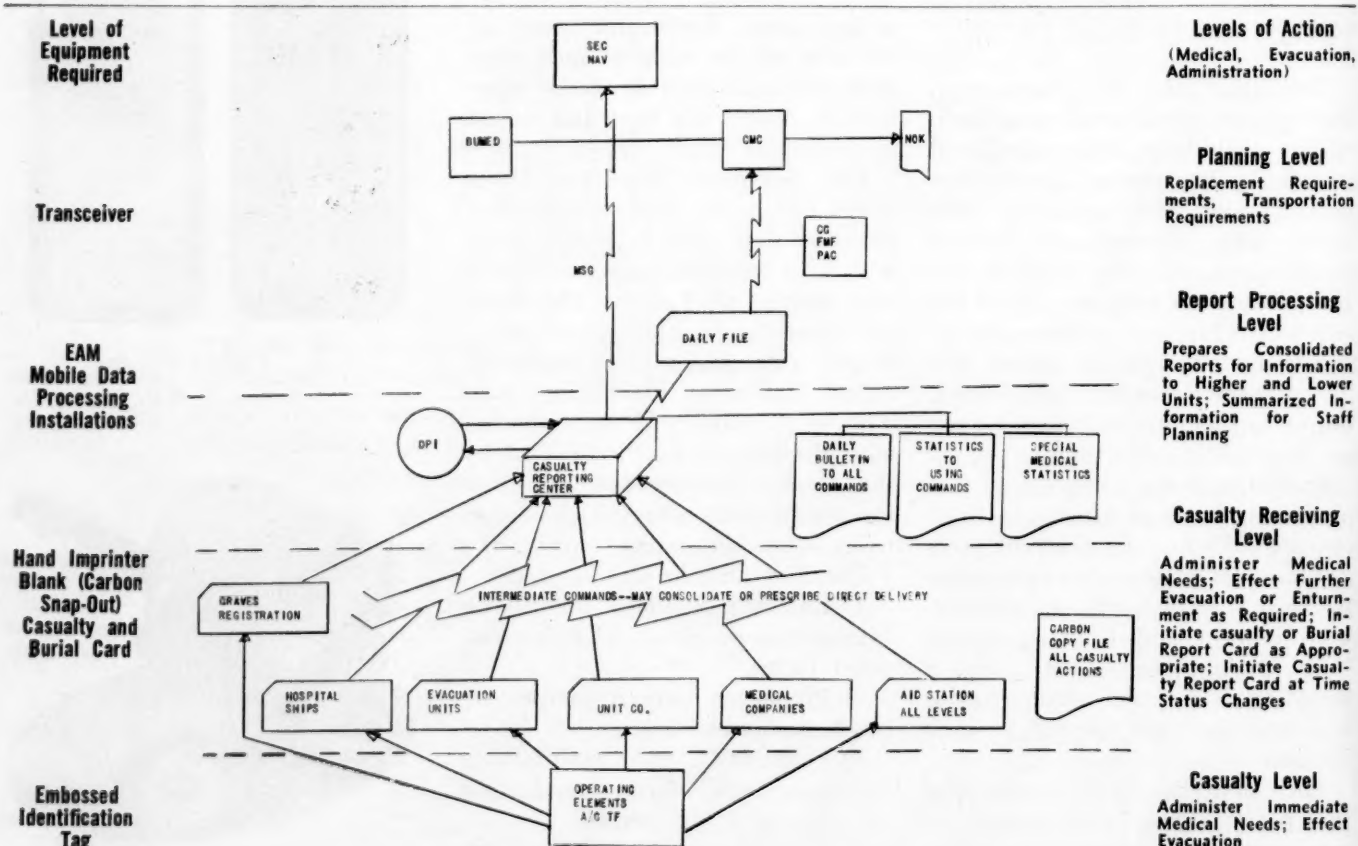


Figure 8



LtCol MacAskill is concerned with economy—especially in paperwork. He holds a PhD in Public Administration. Commissioned via ROC, he has served with III PhibCorps, 1st and 3d Mar Divs. He is presently with the Administrative Division, HQMC.



LtCol Juett, a former enlisted Marine, was a platoon and company commander in WWII, and operations officer with the 2dMarDiv. Other tours included NROTC instructor, Bn CO at Basic School, and 4th Marines ExO. He is now at HQMC.

Remember that embarkation rosters and manifests are usually made up under pressure at the small unit level. Clearly, embossing will reduce mistakes, save man-hours and speed up administrative action.

Field tests showed much routine typing on standard and locally prepared forms could be eliminated. As an example, PRAM prescribes 15 standard entries on Page 11 (Administrative Remarks) of the Service Record Book. The only variable information is the effective date. By embossing a plate with the standard entry, leaving the date to be rubber stamped, all entries can be made without removing the page from the record book.

To use embossed plates, they must be kept current. The result is increased efficiency. Once plates are prepared and proofed, accuracy is assured if corrections are promptly made. About 50 per cent of the errors in unit diary preparation are made in the standard identification information (improper service number, MOS, name, spelling, or rank). The details for using embossed plates in unit diary preparation are not yet complete. Further tests will be conducted.

Present plans at HQMC call for use of this equipment in LANTPHIBEX from January to April this year. From this exercise will come the procedures to be used throughout the Marine Corps.

The success thus far in improving administrative techniques with embossing equipment is not a magic solution for the burdens which plague the small unit commander. One danger of the system is that it can produce *more* paper. Let's be sure it isn't useless or "nice-to-have" paper, but rather paper that will save Marines and time for more important tasks.

Recently a new term has entered the jargon of the professional data manipulators: *source data automation*. It is doubtful whether the term

Daily Liberty Rosters:

Type and proofread	50 min.
Embossing method	5 min.

Time saved	45 min.
------------	---------

Preparation of Unit Roster

Type and proofread	1 hr. 10 min.
Embossing method	10 min.

Time saved	1 hr.
------------	-------

Heli-Identification Checks

Type and proofread	16 hrs.
Embossing method	2 hrs.

Time saved	14 hrs.
------------	---------

Embarkation-Debarcation Rosters (Stencils)

Type and proofread	8 hrs.
Embossing method	2 hrs.

Time saved	6 hrs.
------------	--------

Special Money Requests

Type and proofread	30 min.
Embossing method	3 min.

Time saved	27 min.
------------	---------

Check Out/In Procedure

Type and proofread	45 min.
Embossing method	5 min.

Time saved	40 min.
------------	---------

Initial Preparation of Service Record Book

Type and proofread	45 min.
Embossing method	5 min.

Time saved	40 min.
------------	---------

Daily Guard Roster

Type and proofread	30 min.
Embossing method	5 min.

Time saved	25 min.
------------	---------

Individual Clothing Slip

Type and proofread	45 min.
Embossing method	5 min.

Time saved	40 min.
------------	---------

Daily Report of Non-Effectives

Type and proofread	30 min.
Embossing method	5 min.

Time saved	25 min.
------------	---------

Air Passenger Manifest (Stencil)

Type and proofread	12 hrs.
Embossing method	2 hrs.

Time saved	10 hrs.
------------	---------

Figure 9

is accurate unless mind-reading becomes a reality, but there is equipment now on hand which can go a long way toward mechanizing source data. Embossing machines are one example.

Positive steps must lighten the ever-increasing administrative burden of the small unit. There are two ways: decrease requirements from higher headquarters and improve the means to do the "must" administration. When embossing reaches small units, one administrative clerk and one typewriter can be spared from the T/O of each unit diary reporting unit. (There are about 120 reporting units in a Ma-

rine division.) After further study and implementation, similar savings should be possible in logistics, supply and embarkation.

One of the company first sergeants who took part in the first field test summed up this new gear when he said, "The profitable use of this equipment is only limited by one's imagination."

USMC

Editor's Note: The *Gazette* would welcome information on other applications of this technique or other methods of facilitating small unit administration.

For Your Career Advancement

By Col R. E. Collier
Director, Extension School

Officers who are eligible by virtue of their rank, to attend either intermediate or high level schools will be encouraged by their commanding officers to complete the Junior or Senior School Extension Courses, Extension School, Marine Corps Schools, Quantico, Virginia, as sound preparation for their later enrollment in the resident schools and as evidence of their desire for further resident school education. Such correspondence courses will augment, and not in any way supplant, assignment to resident schools. Staff noncommissioned officers must be prepared to assume greater responsibilities and to exercise greater authority in the event of war or national emergency. In order to prepare themselves for the proper discharge of such responsibilities, each male staff noncommissioned officer shall be encouraged by his immediate commanding officer to complete the Officer's Basic Extension Course, Extension School, Marine Corps Schools, Quantico, Virginia. Marine Corps Order 1500.14 (13 April 1959).

✿ THE MARINE CORPS IS MOVING ahead with the times. Since the end of the Korean War, a new doctrine for the conduct of modern amphibious operations has been developed; the organization of the Fleet Marine Force has been materially changed; new weapons, tactics, and techniques have been devised for use by Marines. The Commandant has stated that it is mandatory that every Marine, throughout his career, maintain and improve his professional knowledge and military skills in order to meet the increasing responsibilities placed upon him by the Marine Corps.

Are you moving ahead with the Corps? Are you meeting the challenge? One important way in which you can prepare yourself and meet the challenges of today and tomorrow is through correspondence courses offered by the Extension School.

The Extension School, a component of the Educational Center, Marine Corps Schools, Quantico, Virginia, prepares and administers nonresident correspondence instruction which parallels the level and type of tactical instruction presented at the resident Basic, Communica-

tion Officers, Junior, and Senior Schools. There are four courses of instruction in the Marine Corps Schools Extension Course Program. These are:

Officers Basic Extension Course
Communication Officers Extension Course

Officers Junior Extension Course
Officers Senior Extension Course

The Officers Basic Extension Course is designed for the few Marine Corps officers who do not attend the resident Basic School and for staff noncommissioned officers who desire to prepare themselves to assume greater responsibilities in event of war or national emergency.

The Communication Officers Extension Course furnishes nonresident communication instruction to staff noncommissioned officers assigned communication duties, and to officers assigned communication duties who have not had an opportunity to attend the resident school. In addition, it provides a refresher course for personnel who have completed the resident course and desire reorientation in the communication field.

The Officers Junior Extension Course and the Officers Senior Extension Course are the keystone

courses of the extension program providing Marine Corps officers with intermediate and high level instruction to meet both immediate and long-range needs. Each extension course curriculum parallels as closely as possible, the corresponding resident course of instruction. As a general rule, the texts used in these courses are the same ones prepared and used in the resident schools; the lessons which accompany the texts are prepared by the Extension School and are based upon the lesson plans and tactical problems of the resident schools.

Getting started in an extension course is amazingly simple. First, the student applies for enrollment by writing the Extension School via his parent organization. If qualified for the course requested, he is enrolled by the Extension School Registrar and sent the first sub-course. After the student completes his first assignment, he mails it to the school for grading. The staff grades the lesson and returns it with personal study advice where necessary. The student reviews the instructor's analysis and applies the principles learned to future assignments. In the meantime, his next assignment is on its way from the

WHY NOT

**Feel secure in your ability to command in your next higher rank?
Enroll in *The Extension Course Program* NOW.**

WHY NOT

**Back your tactical opinions with sound knowledge?
Enroll in *The Extension Course Program* NOW.**

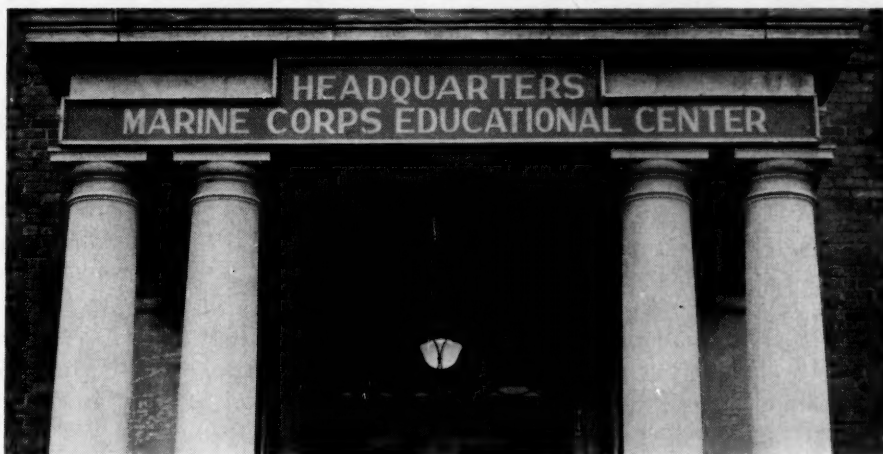
school, continuing the procedure.

Like the resident schools, correspondence education consists of a teacher, a textbook, and a student. But in nonresident study, the teacher is built into the text, and instruction is by written rather than oral communication.

Research activities have shown that home study is an effective means of learning. The student engaged in home study is in a position to learn as much or even more than the classroom student. This may be difficult to see at first glance; however, by citing a few advantages of home study, the point may be proven.

For example, in home study, the student is able to set his own pace; his rate of progress depends upon his own desires and ability. On the other hand, the variety of abilities present in the normal classroom situation may call for a rate of progress that is undesirable to the individual student. In addition, in home study, one is required to accomplish each assignment in the lesson, while the classroom student may be required to respond only when called upon.

A major increase in enrollment in Extension School has occurred dur-



Extension School uses lessons, problems from MCEC curricula.

ing the past two years. While various specialist schools and Marine Corps Institute courses provide instruction in specific occupational fields, more and more noncommissioned officers as they attain staff ranks, are enrolling in the Officers Basic Extension Course to gain the broader knowledge required for the assumption of greater responsibilities and authority. Likewise, increasing numbers of officers currently participate in the extension course program. Over 40 percent of the current class at Junior School have completed some home study military courses, and as a group, these officers were

found to be better prepared for entrance than other students. Still other officers have enrolled in courses to keep abreast of our rapidly changing doctrines and refresh themselves in the latest tactics and techniques taught within the Educational Center. Such increased enrollment is encouraging, for it reveals a high degree of professional interest on the part of individual officers, a growing recognition of the need to move ahead, and a willingness "to meet the challenge."

Beginning with this issue, the GAZETTE, in cooperation with the Extension School, Marine Corps Schools, will present a new feature entitled "The Extension School's Challenge." This feature is designed to demonstrate to all Marines the importance of a sound program of self-education. As was recently reemphasized by the Commandant, such a program augments instruction received in resident courses of the Marine Corps Educational Center, and is of utmost value in preparing for positions of greater responsibility and authority. Why not test yourself by answering the questions on the next page. If you should find one or two "gaps," remember that the correspondence courses offered by the Extension School will help you fill them with sound professional knowledge. Write for the School Catalogue today. Use the "ticket" on the left.

USMC

THROUGH THE EXTENSION COURSE PROGRAM	
FIRST CLASS	Your Rank, Name and Address:
ISSUED TO OFFICERS AND STAFF NCO'S	Mail Today for School Catalogue Fasten to free card, Gazette will forward.

ADVANCEMENT

CAREER

THE TICKET FOR

The Extension School's CHALLENGE

BASIC SCHOOL LEVEL

- 1** Which of the following weapons delivers the most effective fires against a fortified position?

- a. 4.5-in rocket launcher.
- b. 105mm howitzer.
- c. 4.2-in mortar.
- d. 106mm recoilless rifle.



- 2** The commander has several responsibilities in sending out patrols. One of these is the selection of a patrol leader. In his selection of a patrol leader, the commander gives primary consideration to which of the following?

- a. Enemy troop dispositions.
- b. The mission of the patrol.
- c. The nature of the enemy counter-reconnaissance screen.
- d. The aggressiveness and resourcefulness of each individual within the group from which the leader is to be chosen.

- 3** Among the three radio sets AN/PRC-8, 9, and 10, the principal difference is in:

- a. Range of the three sets.
- b. Frequency coverage.
- c. Weight of the sets.
- d. Power source.



JUNIOR SCHOOL LEVEL

- 4** When the Division Main Command Post displaces,

- a. control is exercised through the Secondary Command Post, or the Tactical Command Post.
- b. control is exercised from the old site until a forward echelon establishes adequate communications at the new site.
- c. the commander exercises control from the Administrative CP.
- d. the commander goes forward to the new site with the required staff members and minimum communications and exercises control from that location while the old CP is closed out.

WHY NOT

**Increase your worth to the Marine Corps through professional study?
Enroll in *The Extension Course Program* NOW.**

- 5** The Quartermaster General of the Marine Corps is appointed by the

- a. Commandant.
- b. Secretary of the Navy.
- c. President.
- d. Chief of Naval Operations.



- 6** The stockage level of supplies maintained within a Logistic Support Area (LSA) is usually

- a. 3-5 days.
- b. 15-20 days.
- c. 20-30 days.
- d. 60 days.

- 7** The landing support company of the service battalion is usually assigned as a (task organized as a)

- a. shore party team.
- b. shore party group.
- c. shore party company.
- d. shore party.

- 8** Which of the following are most susceptible to damage by nuclear blast effect?

- a. Troops in tanks.
- b. Military equipment.
- c. Troops in bunkers.
- d. Unidentified targets.



SENIOR SCHOOL LEVEL

- 9** At what relative time in an amphibious operation does the amphibious task force commander assume full responsibility for the landing force?

- a. When the initiating directive is promulgated.
- b. At the commencement for planning for the operation.
- c. When all ships and units comprising the amphibious task force reach the point of rendezvous and proceed to the objective area.
- d. At the time the landing force is embarked.

- 10** In the support of a Marine division in the defense, for which of the following type missions are tanks best suited?

- a. Counterattacking.
- b. Roadblocking for forward battalions and companies.
- c. As part of the general outpost.
- d. Reinforcing the fires of the artillery.

(Answers on page 68)

GOOD HEAD!

HOW TO FLY A DESK

I SUPPOSE THAT BY NOW EVERYONE KNOWS THE whereabouts of Major Ed Pittman, but I didn't until a couple of months ago. I ran into him in a most unlikely place (for Ed)—in a bar! I was spending an uneventful RON at Quonset Point, when I sighted his big hand across the bar. He was reminding a Wave Lieutenant that she was out of uniform, as she had forgotten her broom. It turned out that he was in VX-6, enroute to the South Pole for the winter. Anyway it was good to see him because he always has some new ideas on flying. The Navy JO's in VX-6 were clustering around Ed's bald head to pick up a few good thoughts from a real pro and they couldn't have chosen a better man. Ed was trying to explain that it usually pays to climb into a wind (a theory which I've never really understood). I got to thinking the next day what a real pro Ed is. In his many years of flying, I don't think that he's ever been assigned to a desk. *His case, though, is the exception.* The rest of us are bound to log many years flying a desk. So it's almost impossible for us to remain as proficient as Ed is. I'm convinced, though, that even during a desk tour, there's no real reason to lose too much flight proficiency.



It's hard for ground officers to realize why the maintenance of flight proficiency is important. It's possible to leave almost any other type of business for a few years and then take it up again—successfully. This isn't true, though, in flying—because flying decisions must be made instinctively and immediately. There's no time in the air to review the Flight Handbook.

There are many good *excuses* for aviators on a desk job not to maintain a true heart proficiency. Most desk jobs are demanding. A person really doesn't have enough time to plan a good training flight. In most places it takes an unconscionable time to get an IFR clearance. If a desk-bound aviator flies to another airfield in actual weather, he runs the risk of having his return delayed by bad weather.

**THE THINKING TIGER
BESTOWS HIS HIGHEST
ACCOLADE "GOOD HEAD"
ON IDEAS TO MAKE GOOD
MARINE PILOTS BETTER. SEND
YOUR CARE OF GAZETTE.**



The price of not maintaining a good proficiency is too high to allow it to happen. One of about three things happens to an aviator who lets his proficiency slip. He may get into a squadron and promptly kill himself trying to prove that he's better than he really is. He may become pusillanimous (i.e. a sniveler) and quit flying, or be forced to quit by a Naval Aviator's Disposition Board. Or he may, by a combination of miracles, pull himself up by his bootstraps and get back with the program—BUT THIS TAKES TIME.

I've polled a number of aviators whose proficiency hasn't slipped much during a desk tour. Here are a few rules which help them keep their proficiency up:

- 1) Never bore holes just to fog time.
- 2) Fly actual instruments or at night whenever possible.
- 3) Land at strange fields as often as possible.
- 4) Obtain and maintain a green card.
- 5) Never miss a chance to broaden your aviation experience.
- 6) Study aviation. When you finally get to that squadron, LEARN the flight handbook. Study it while seated in the cockpit. Have someone give you a blind-fold cockpit checkout; know every switch and control by its feel. Know the emergency procedures cold. If you spend two days or more in *serious study*, the chances are that you'll know the new airplane better than many of the other pilots in the squadron. If you've been serious in the Beechcraft, your instrument proficiency will be as good as the next pilot's. In fact, in just a few days, the other squadron officers will be looking up to you as a real pro! Please give it a try. We all hate to attend funerals.

USMC

THE REAL PRO KEEPS UP



❧ SHOULD WE SCRAP THAT SO-CALLED "Bottleneck in Close Air Support"—the DASC?

Well, it isn't perfect. Let's take a look to see if it is indeed obsolete, obsolescent, or even—as some claim—an anachronism from WWII.

First, the DASC still uses heavy, bulky gear. This is not the modern trend. But what does it really need? The AN/TSQ-5 or 6, the bubble of air control units, is not a must for the DASC. It helps controllers be comfortable, but many operations have been run using a console set in the back of a 6 x 6 truck, a pyramidal tent or, best yet, a series of radio jeeps, AN/MRC-35A.

With these setups, we can throw out the old "tortoise" style of locomotion and adapt the DASC to any mobile concept, while still maintaining its function as a central control agency.

The specifications and charges against the DASC are: immobility and poor communications. Immobility we can lick. Now, why not place such light-weight DASCs at regimental level? This will aid communication, if we can coordinate these DASCs. The TACC is the senior controlling agency responsible for all airborne aircraft. It isn't and doesn't need to be highly mobile. The TACC assigns airborne planes to subordinate control agencies for actual combat operations. Regimental DASCs linked to the TACC and each other could coordinate. From regiment, radio to battalion TACPs will work.

While on communications, let's take a hard look at the present DASC comm system.

The Tactical Air Request net (TAR) fails because it is only HF. The DASC is the focal point of the

TAR system; all requests funnel into it from the TACPs. A radical solution to this has been offered: eliminate the DASC, thus cutting out the TAR and having positive communications between air and ground. How? By using solely the UHF line-of-sight Tactical Air Direction (TAD) nets.

Consider the implications of this idea. The TAR does not interfere with air-ground communications, for TAR and TAD are separate nets. One request-direction net can only be a hodge-podge of garbled traffic. And the TAD is UHF.



There are further complications when we consider UHF line-of-sight between TACPs and a TAC(A). Assume a TAC(A) is brought into the picture for control of a strike. He is an OE or maybe a chopper, orbiting as far away as 50 miles at maximum heights of 5,000 feet. Terrain features alone would prevent line-of-sight communication with the TACP in most cases. Also, UHF has a maximum output of 10 watts, making 50-mile transmissions improbable. With or without the DASC, HF frequencies are a must.

Rather than eliminating the DASC and its TAR, a solution to the comm problem is this: the Marine Corps is getting a system known as SSB (Single Side Band). This is compatible with gear running up to 30

megacycles (MHF-HF). It works great distances and it suits DASC communications. One more thing: It is light.

Often we find only one TAR net in use for a division front. As many as 14 stations can be trying to use it at once, with none of them getting through. If the DASC stays at division level, then we need a net for each regiment. If there are regimental DASCs, then TACP requests from two or three battalions should never bog down even one TAR net. The problem of a crowded request net is so simply solved that it is hardly a just cause for abandoning the TAR.

Turning from communications, let's consider other aspects of modern warfare which, at first glance, seem to minimize the value of a DASC. One point is the fuel limitation of jet aircraft. Gallons go fast at low altitudes in a jet. Since that's where an attack plane operates, time-on-station is less these days than with the propeller-driven AD and her mates. The need for immediate response to air support requests grows daily. Certainly, any agency that slows down the process should be abandoned. We can't afford bottlenecks. But wait: jets don't orbit at their attack altitudes. Jets orbit at heights (20-45,000 feet) where their fuel consumption is lowest. At 450 knots, jets can descend to attack altitude and run their missions in three or four minutes. They can stay on station for 1½-2 hours. This suits the DASC method, but let's examine the proposed improvement.

Can we save precious time by having aircraft report directly to battalion commanders? Perhaps, but look at the cost. Any such system would be extremely expensive, requiring a great many planes and pilots; hardly acceptable criteria for the Marine Corps. Isn't this reason enough to shelve that solution?

Basic to the problem must be the question of how much direct air support ground can use. The first rule for air support is, "If you can't get it with any other supporting arm, then call in air." This means most targets will be hit with artillery or naval gunfire; requests for air do not pour in endlessly. Hence, no "stacked up" missions and waste of time. In one recent maneuver the

A rebuttal to Bottleneck in Close Air Support (Gazette: May '59). The author denies that the Direct Air Support Center is a "bottleneck." He says air support can work without bulky gear.

MASS-3 DASC handled 37 total air requests from two regiments in 11 hours. The total was larger than normal because battalion TACPs had been urged to "force feed" requests to the DASC for training. Result: a little over three requests an hour. The point is this: six battalions submitted 37 requests. Per battalion that's one request every two hours. Surely the DASC can handle three to four requests an hour without wasting time.

What if the DASC gets rush business? The DASC can process several missions at once over two or more TAR nets. With a smoothly functioning DASC, MASS-3 has run 13 missions from start to finish in two hours using actual air. This does not reflect the time and coordination required to handle several TAC(A)s during that two hours, nor does it include a number of helicopter missions being run at the same time.

The FSCC

Up to now, the FSCC has not been mentioned. It is a most important control agency, coordinating as it does all air, artillery and naval gunfire. Air strikes must have positive clearance into an area free from the fire of other supporting arms. Thus, practically every mission run requires a restrictive fire plan. This is the vital job of the DASC, to process missions through the all-important FSCC, which is able to cancel any air support request if it sees that naval gunfire or artillery might endanger the aircraft.

Here we have seen the control required for air safety with regard to friendly forces. How about the enemy? The DASC, working at division or regimental level, compiles intelligence and pilot reports of enemy positions, AAA locations, and the like, and it develops the "big picture" of what the opposition's strengths are against air support over the entire zone of action. With this information, controllers in the DASC can determine the most advisable headings for a strike, minimum altitudes, and which way to pull out of runs, all valuable items

for the attack pilot to know. Likewise, controllers can cancel missions if they appear to endanger friendly positions, for the DASC maintains the friendly situation also.

When we think of air and air safety, we cannot stop with attack aircraft. Fire coordination and flight space are needed not only for close air support (A4D, FJ-4B), but also for CAP (F8U, F4D), TAC(A)s (TV, F9F-8, OE), TAOs (OE), helicopters (HRS, HR2S, HUS, HOK), and aerial resupply (R4D, R4Q), all of which might well operate in one area simultaneously. The DASC must consider the safety of each while running direct air support, and keeping positive communications between air and ground to assure this safety.

Not only does the jet attack pilot risk collision with these aircraft if proper control is not maintained, but he is endangered by other attack planes. Assume one jet operating per battalion front. Even with battalions separated by ten miles, safe flight isn't guaranteed. Jet aircraft require a 6 to 8-mile area when orbiting in a standard rate turn at 300 knots. The DASC coordinates orbiting aircraft at varying altitudes which minimize chances of mid-air collisions. Even with vertical assaults, beachheads must be established and the main force expands its front from a relatively small perimeter. Thus, the air space for direct air support will be crowded, and orbit points, assigned altitudes, and number of planes in an area must be added to the DASC's coordination check-off list.

Take another look at helicopters for a moment. The more stress we

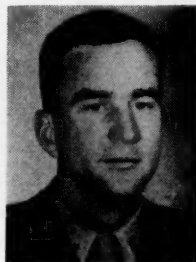
place on vertical envelopment, the more important the DASC becomes, for it serves as the helicopter controller over the HD nets. This partially usurps the role of an HDC. It is necessary. The DASC has the nets to handle helicopter requests coming from the TACPs (the HF TAR nets). Further, the DASC has knowledge of and contact with the aircraft which may be used for CAP. Finally, the DASC has control of all direct air support and can prevent it from tangling with any helo-lift which might pass over or near air support targets.

Vital Link

Not only helicopters, but all aircraft will soon stand in danger from friendly missiles. Air must be assured safe flight while we employ ground-to-air missiles against "bogies." We must clear the area of aircraft at once, for a heat-seeking missile can't tell enemy from friendly planes. Hand-held AA missiles won't simplify the problem.

The DASC is no bottleneck—it's a vital link between air and ground. Just as its name implies, the DASC makes Marine direct air support possible. With intelligent and foresighted command, it will serve an even greater function in the future, as we make more and more use of concepts inspired by nuclear threat, vertical envelopment, and missiles of all kinds. Unfortunately, war is not getting any more simple. In our search for simplicity and speed we can't afford to ignore the facts which call for more—not less—control of powerful weapons. The wide-open spaces of modern operations just aren't impressively large for jet aircraft.

USMC



1stLt Ludington believes the direct air support center will play an important role in air control in the future and is fully worth defending. He has been an air control officer since graduation from Basic School and is presently assigned to MASS-3, 3dMAW. A 1957 graduate of Yale University, he received his commission through the PLC program. Lt Ludington has a secondary MOS, 0202, intelligence officer.

FSCC: WHO'S IN CHARGE?

SUPPORT BY FIRE: PART VII

By LtCol T. N. Greene



"Coordination: The act or state of working together or functioning in harmony; mutual adjustment."

—The Winston Dictionary, 1942

THE AMPHIBIOUS ART HAS UNDERGONE significant changes since the less complicated days of 1942. Not all of this progress has been in support of that neglected Principle of War: *Simplicity*. As a case in point, consider the FSCC/FDC. Its full title alone: "Fire Support Coordination Center-slash-Fire Direction Center" is complex. To describe this mysterious military mammoth is akin to the fabled example of six blind men trying to describe an elephant. Much depends on what part of the beast you touch first. Like the elephants of Hannibal, the FSCC/FDC is held in various degrees of esteem—ranging from the awe of the simple spear-carrier to the exasperation of the Headquarters Commandant. And just as Hannibal's elephants were turned against him by the wily Scipio Africanus, so does the FSCC present a powerful danger

to friend and foe alike.

The danger that the FSCC represents lies in the historic character and tradition of Marine fighting forces. Small, compact, and self-sufficient forces of combined arms, Marines have never placed undue reliance in the promises, power, or performance of pyramiding higher echelons. The fighting Marine is well known for his distaste for battlefield formality, protocol, and red tape. Rather, he is characterized by an intense desire and ability to get on with the combat task at hand. The clear role of any FSCC is to support by fire that combat task, with a minimum of restriction or that sort of "coordination" which has become synonymous with delay and frustration. The air-ground team of the modern concept must not be bound to a white elephant; neither can it marshal its complex and potent fire support means without realistic systems to ensure "functioning in harmony." It may be useful to approach this subject by considering first how the FSCC came to be with us. Next

we should examine what functions can be written off as obsolete and which must be sharpened and improved, considering both conventional and atomic war. Finally, from these bases we can discuss the essential matter of command and staff relationships, summed up as "Who's in Charge?"

It is useful to remember that we did not always have an FSCC; even, on occasion, to wish that such were still the case. We fought most of WWII with liaison officers. Each BLT and RLT commander normally had one liaison officer each from artillery, naval gunfire, and air. Taking station close to the commander and his S-3, these liaison officers would naturally effect a certain amount of face-to-face coordination among themselves, such as sharing maps, watches, cigarettes, and information. Then, one day, a friendly aircraft was shot down by what was believed to be friendly fire. This was the birth of restrictive fire plans, SOPs, bigger tents, and finally a specially-built inter-communications sys-

Do commanders need a Fire Support Coordination Center?

What would happen if all FSCCs were abolished from the T/O?

The author says the FSCC is a myth and the name should be scrapped.

tem for the division FSCC which almost no one could understand, much less make work. This trend progressed in Korea to the predictable ultimate when long hours passed with artillery silenced awaiting an air strike, or, feeling for the other end of the elephant, longer and longer delays were imposed in getting vital air strikes. The reaction came in the Reno-Vegas-Carson fight when Marine pilots flew vital missions without restrictive plans, preferring danger to delay, and considering that friendly ground fire would suppress enemy AAA.

In the age of the jet with short time on station it is increasingly clear that the basic reason for creating the FSCC is obsolete, although a few simple restrictive plans will still be required for helicopters and fixed-wing aerial delivery. It is likewise clear that competent fire support representatives will not be battling each to attack the same target if there is no FSCC. If artillery attacks a target it cannot crack and air or naval gunfire has to be called in later, not much has been lost. Troop safety is not a function of the FSCC—it remains the responsibility of the troop commander who authorizes the fire and the agency which delivers it. There is no way to pass this buck to a committee or to a "center." Further, in the wide-open spaces of modern doctrine there must be less and less concern with such historical contretemps as star shell casings sailing over unit boundaries, drifting smoke clouds, and accidental illumination of patrols from a neighboring unit. In the modern concept of operations the commander on the spot must be given the means to do the job and then be trusted to do that job. Distance precludes either peering over his shoulder or closely examining his overlays for planned fires. In fact, seldom will the means, time, or tactical situation permit firing the traditional divisionwide "preparation" for an attack, unless it be atomic.

What use then is the FSCC on the modern battlefield? Can we get rid of it? Well, let's assume that all

FSCCs are now abolished, just as the Supporting Arms Center (SAC) was once deleted from doctrine. Despite the many good reasons for getting rid of the pernicious "center" there are no new reasons to indicate that we can get along without liaison representatives from each supporting arm. Like it or not, war is not getting any less complex in its technical branches. Where do we put our LnOs? There is no logical place to put them except together, close to G3/S3 and the commander. They must be kept informed of operation plans and of each other's plans and they must keep G3/S3 and the commander informed of their activities. If we do not place a target information section in this "liaison officers' tent" to record, cross-check, and disseminate target information, G2/S2 will lose at least half of the available

intelligence data, while the "liaison teams" will be burdened with duplicating each other's work. We will also need access to the supported infantry communications system for efficiency. This is beginning to look like a small empire, so let's compress it further. Let's do away with an artillery liaison officer, since the artillery CP must be with the supported infantry for protection and radio relay communications. Let's put the other liaison officers with the artillery FDC. Now, at least at BLT and RLT level, possibly at Brigade, combine the FDC with S3 and S2 into an operations center. At division, we'll probably need a separate tent.

But remember, for purposes of this discussion there is no FSCC at all. We have only the commander, his staff, and a few fire support technicians who can give advice or relay



"The FSCC . . . must prepare effective counterfires."

messages, if asked. What tasks will the commander need to perform to get best results from his fire support? Are these tasks so technical that the commander must have a special "center" to take over part of his job? To answer these questions, consider a typical planning sequence.

First the commander makes an estimate of the situation, proposing possible courses of action and rating them in the light of his mission, the terrain, and the relative position and combat power of his own and enemy forces. To do this, formally or informally, the commander will receive estimates from his staff. These may be formal, written documents, they may be oral briefings, or they may be merely answers to specific questions the commander will ask. Certainly, having no mysterious FSCC to handle his fire support, the commander will be greatly concerned with the capabilities of available supporting arms to tip the balance of combat power in his favor. Just as he would in any staff estimate, he will be particularly concerned to note which course of action can be best supported by fire and which least well. He will then make his decision, based on a consideration of all known factors.

At this point our hypothetical commander must formulate a concept of operations. Again, having no FSCC on which to lean, he will be particularly concerned with integrating his scheme of maneuver and his plan of fires. Just as he takes care to point out which terrain must be seized and in what order, he will describe where he wants the weight of fire and which targets take highest priority. For both fire support and maneuver elements he will be careful to state what must be done without prescribing how to do it in detail.

It is here, in this oversimplified description of concurrent planning, that the G3/S3 enters the picture and determines for the approval of the commander a task organization and an order of execution for this concept. G2/S2 makes his collection plan, logistics and communications make theirs, all staff sections get together on certain details of the task organization and the order. Sometimes, in the past, the FSCC would go ahead at this point and make up

the plan of fires, just like another staff section. Here there is no FSCC. How shall it be done? Obviously, G3/S3 must do it. He must task organize his fire support and assign missions, going into the approximate amount of detail he would with his maneuver elements. He must assign both supporting arms and maneuver boundaries. Warning orders, staff visits, phone conversations will all be used to get lower and higher echelons into the planning process. Advice will be asked of the supporting arms liaison officers just as it is of the CEO or MTO. Each will make up his annex, overlay, or other required implementing plan. G3/S3 first, and the commander ultimately, will check them to see that everything meshes.

Apparently, conventional war can be planned without an FSCC. How about atomic? There is no significant difference, other than the mighty effects of atomic fires which may cause the scheme of maneuver to be planned to exploit such fires. Certainly, the commander will carefully consider the atomic picture in both his estimate and his concept. Whether he requires written estimates or not, he will surely want a relatively complete atomic analysis



for targets of interest. He can, if he wishes, require the assistant G3/S3, atomic weapons employment officer, to make this analysis. However, no atomic weapon can be delivered except by one of the supporting arms

and advice from a liaison officer from the arm chosen will be required. A more orderly process would be for the commander to state what damage he requires to a given target and then direct each supporting arms representative to estimate what effects he could achieve by both conventional and atomic means. This would leave the assistant "three" free for his major task of ABC defense, as well as to continue to advise and assist the G3/S3 in completing the details of an integrated plan for maneuver with atomic fires.

In either atomic or conventional war, the FSCC is not required as an entity to accomplish normal planning. All we require is to have competent liaison teams from each supporting arm, with target information and communications facilities, working for and under the cognizance of the G3/S3. Let's now examine some of the more complex tasks accomplished within the FSCC and determine whether they justify its continuation.

Restrictive fire plans have been discussed. They should be discarded, except for helicopter and transport aircraft or in the case of unusually heavy fires. Any such required plans can be laid on well in advance. G3/S3 must be aware of them and can coordinate them. The prevention of mutual interference and selection of the right weapon have long been a matter of concern. As indicated, these are over-rated. No ground observer or controller fires in the vicinity of troops without the approval of the appropriate infantry commander. We must simply trust the man on the spot. In deep areas we can usually afford to use the means recommended by the observer to save time. If the target is very important, the commander will be notified.

Another activity in which FSCCs have engaged, particularly in the static lines of Korea, is the fashioning of complex, highly-coordinated fire plans, typified by the usual anti-mechanized fire plan with its highly formalized routes and concentrations. Since artillery and naval gunfire have almost no effect on tanks when fired other than direct fire, and a particularly negligible effect when fired unobserved, this appears

a waste of time. Planning to cover choke points, minefields, and barriers by fire is worth while, since the fires can kill the enemy troops who must clear them. The net effect of hundreds of concentrations is that it simply takes longer to find and use the prepared firing data than it does to fire a mission on any set of map coordinates. This is particularly futile in the case of naval gunfire. Such over-planning can be useful in a static situation, but has no place on the modern battlefield. It is primarily required when very centralized control is maintained. When supporting arms are decentralized, as ranges require they must be, it is better to be flexibly disposed and to keep alert rather than to spend long hours planning for every conceivable emergency with a clouded crystal ball.

There are only two areas that recommend a supporting arms entity such as an FSCC. These are both framed by the simple fact that the Marine Corps is light on artillery, using air and naval gunfire to make up the difference. Accordingly, the important functions of counterbattery/countermortar and of keeping the enemy fully engaged and relatively immobile by deep harassing and interdiction fires must be shared by all arms and planned jointly in some detail. However, the commander and his operations officer prescribe the weight and timing of such efforts and can readily establish policies and procedures to insure joint planning among liaison officers attached to their headquarters.

Let's face it. The commander does not need an FSCC; the FSCC needs a commander and command guidance. The operations officer does not need to lean on the FSCC to make up a plan; the FSCC needs to lean on a strong operations officer who can insure timely, coordinated, and concurrent planning. The FSCC is a myth, not a command echelon. It has no powers of its own; it executes only those functions that any supporting arms liaison officer would be asked to execute on any staff. Moreover, it does not coordinate—except as the word means to function in harmony—the commander and his staff coordinate. Now would be a good time to scrap two phrases: "FSCC" and "coordination of sup-

porting arms." What we are really talking about is an FDC—a Fire Direction Center. Its job is not to restrict, to delay, or to coordinate. Its job is to plan jointly to place fires where the supported unit wants them, to fill in the details of the



commander's mission and concept, both by advising G3/S3 and by executing his relatively broad directives.

The requirements for such an FDC for all supporting arms are these:

- 1) Appropriate representatives of each supporting arm, trained also in atomic analysis with emphasis on the technical features of delivery by own arm.
- 2) Communications access to own and infantry units, with maximum integration to allow cross-switching.
- 3) A joint target information section to perform the vital functions of liaison with G2/S2, liaison with counterbattery/countermortar section, recording and display of conventional and atomic targets, and aggressive poststrike analysis.
- 4) Closest possible physical access to and liaison with supported unit operations center and DASC, if present.
- 5) Someone to be in direct charge of running this joint center as efficiently as possible.

If the officer placed in charge of the center were called the fire direc-

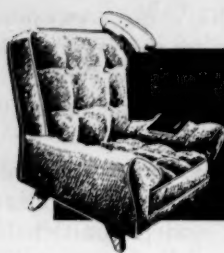
tion officer (FDO), no confusion should remain as to the commander's responsibility to be *the* Fire Support Coordinator in name and in fact.

Under such a system and terminology it should be perfectly clear to say that the modern battlefield requires greater emphasis on coordination—the coordination by commanders of fire and maneuver. Commanders and operations officers must learn to achieve such coordination by proper task organization, and by control measures for both fire and maneuver, such as the TAOR replacing the many "lines" we've used before. Above all, they must learn to include supporting arms considerations earlier in the planning process allowing fully coordinated and concurrent planning. On the other hand, in the technical field of supporting arms we need more fire SUPPORT and less fire support COORDINATION. We still need a center—a place where joint planning can be expedited. This center must emphasize the vital ingredient of fire support: rounds on target. It must not lose between desks either conventional target cards or atomic target folders. It must exploit its many eyes and ears to gain information and must share that information among all arms and staff sections. It must pay particular attention to a weakness of the amphibious landing force in counterbattery and prepare to execute effective counterfires against atomic cannon and launchers. Finally, it must record results of its fires, analyze those results, and press home the attack until the results desired by the commander are accomplished.

Until or unless we have another change in terminology, the FSCC/FDC is what we have. To use it properly, we must do these things:

- 1) Recognize the commander as the only "Fire Support Coordinator."
- 2) Emphasize support and de-emphasize "coordination" within the FSCC.
- 3) Emphasize rapid, effective processing and analysis of atomic and conventional targets within the FSCC.
- 4) Achieve a "state of working together or functioning in harmony."

USMC



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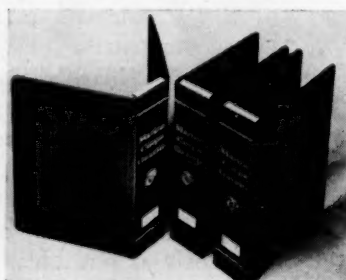
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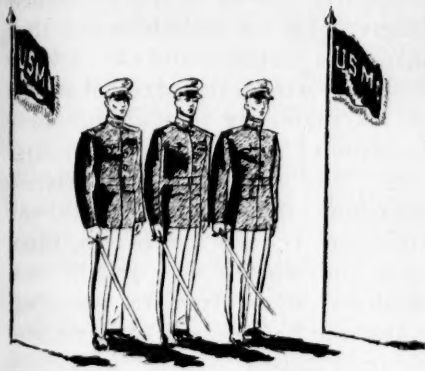
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passing in review



Book Reviews of
professional interest.



A HISTORY OF MILITARISM

ALFRED VAGTS. Revised 1959 edition. 542 pages. Meridian Books. \$7.50

When this powerful indictment of militarism was first published in 1937, it almost perfectly reflected the prevailing attitudes of an era when the soldier was held in low esteem and when most citizens, at least in the Western democracies, were more afraid of war and its excesses than of the consequences of unchecked aggression. Moreover, Dr. Alfred Vagts, whose personal antipathy to militarism owed much to his experiences in the German army on the Eastern front in WWI, hoped that his *History of Militarism* would serve a specific purpose; it was written, he now explains, "in the early expectation of a large conflict to come, into which the war-unwilling democracies would be drawn at a time . . . when there was danger that they might prove unprepared thanks to a militarism on the part of their soldiers which would limit their best efficiency."

Any one who turns to this revised edition should certainly keep this in mind. The 1959 edition of *A History of Militarism* is the same book, with only minor modifications, that mirrored the sentiments of the 1930s when soldiers and civilians were poles apart. Dr. Vagts has made a few changes in the original text, but these in no way modify the nature of his indictment of military men and their ways. He has, furthermore, made almost no use of the multitude of recent studies which bear upon the history of military affairs prior to WWII—being content to remark that, on the whole, they simply confirm his original thesis. To cover the period from 1937 to the present he has added two new chapters, but in these pages he is pursuing a different theme and

concerns himself not with the foibles and follies of soldiers but with the evolution of what he terms "civilian militarism."

Dr. Vagts, to be sure, understands that armed forces are a necessity, that wars must on occasion be fought, and that military men are capable of making rational, efficient use of the manpower and material put at their disposal. But in this study he simply pays no attention to such themes; his entire attention is focused upon the excesses of militarism in Europe and America—upon those things which create military inefficiency, which advance the interest of the military establishment at the expense of the interest of the state, and which are dangerous to civilian society.

The result is—and I can think of no phrase more apt than one used



by a discerning reviewer when the first edition appeared 20 years ago—"a treatise written objectively from a definite point of view." The sins of the military from feudal to modern times are described with great erudition and with painstaking devotion to all the apparatus of research scholarship. There is abundant detail about the tendency of military men to promote their own self interest at the expense of the public good, to be clannish and excessively concerned with honor concepts which are relics of the age of feudalism, and to intervene with disastrous consequences in social and political matters about which they

know little. It must be admitted that the evidence, drawn from an almost unbelievably large range of sources, is often impressive. The account of the political misdemeanors of the Prussian staff, for example, is thoroughly convincing, just as the interpretation of the Dreyfus case makes it virtually impossible to find any grounds upon which the actions of the French military hierarchy can be defended.

The trouble with this mass assault upon the excesses of military men is, of course, that it is essentially a lawyer's brief and that, as in all lawyer's briefs, the author cannot admit that there is another side to the case. Indeed, on the basis of the evidence which Dr. Vagts presents, it would be difficult to imagine any army ever winning a battle or being concerned with anything except its own self-advancement. Dr. Vagts, moreover, can justly be accused of making European experiences into universals; conditioned by the Prussian example, his basic yardstick for measuring the extent of militarism is the European system which has in fact often gotten out of control. But this means that he is often less than fair to the American army and its leaders. Leonard Wood, for example, was a far more complex individual than the extremist who appears in these pages as a soldier primarily interested in blooding the troops and advancing purely military interests.

The last hundred pages—which cover the years since 1919—are the least rewarding. The chapters on the two decades between the world wars, written of course in 1937 and reprinted almost without revision, are sadly dated and cry out for revision. It is simply ridiculous to repeat the vapid charges about French militarism in the interwar



years; 1940 should, if nothing else, have put a stop to that. And the discussion of Germany's preparations for total war seems quaintly irrelevant in view of the evidence turned up by the various Strategic Bombing Surveys after 1945. The last two chapters, which are the only new chapters in the book and deal with WWII and the cold war, are disappointing since Dr. Vagts has unexpectedly shifted his ground and is concerned with a different theme. The traditional militarism of the officers, he admits, did not develop during the war, but was superseded by "civilian militarism"—that is, the tendency of civilian leaders to adopt militaristic values and impose them upon all of society. Nothing in the earlier pages has provided adequate preparation for such an abrupt transition; nothing he has written would suggest that the officers were capable of accepting civilian restraints, and he offers no explanation of why the militarism of the soldiers did not develop as anticipated. His discussion of the militarism of the civilians is sometimes convincing—as, for example, when it deals with Hitler and Mussolini—but is marred by such dubious generalizations as the assertion that it was civilian influence which in all countries made war more total and terrible than the professional officers desired. Moreover, though Dr. Vagts believes that the civilian heads of state in the western powers did a far better job than their Axis counterparts, he tends to petty fault-finding in his account of Roosevelt's and Churchill's war leadership and, at several instances, seems on the verge of denying them

much share in the Allied victory.

The sum total of these criticisms does not mean that *A History of Militarism* is a book which professional officers may ignore as merely another anti-military diatribe. One might wish that Dr. Vagts had chosen to discuss themes other than the excesses of the officers and their allies; if he had not, for example, been so blinded by their faults and had given some attention to the evolution in the twentieth century of a true professionalism in many armies, he might not have been so surprised by the fact that the traditional militarism he feared did not develop after 1939. But even with its many limitations, Dr. Vagts' volume is a valuable storehouse of information on a wide variety of military subjects. It will undoubtedly irritate many officers to have the sins of their profession portrayed so unsympathetically, but it is also valuable for them to be reminded that military men—like any other group of professionals with their own interests to guard and advance—have committed their share of sins of both omission and commission. And modern Americans, who in recent years have shown a lamentable tendency to let foreign policy be dominated by military needs, might also be reminded that there is such a thing as militarism and that, as history has shown, it is dangerous.

Reviewed by Dr. R. D. Challener

TURNCOATS, TRAITORS AND HEROES

JOHN BAKELESS. 406 pages, Lippincott. \$6.50

Mr. Bakeless is a military man—has been since 1918—and he has the

perceptive eye of a highly skilled observer. He has something else that makes his writing stand out: a vivid style that weaves the personal stories of his characters into an intensely suspenseful and fascinating narrative. The reader is right there—breathing the same air—with the turncoats, traitors and heroes, those men and women who fought that shadowy, silent type of war that forms the background of naval and military history.

At least 85 per cent of the stories are new—have never been told before—and the remaining 15 per cent shed new light on such well-known incidents as the Nathan Hale tragedy and the plan of Sergeant Major John Campe, one of Light Horse Harry Lee's cavalymen, to kidnap the traitor, Benedict Arnold, from under the noses of the British. And the reader lives and breathes right alongside Ann Bates—rated as the best woman secret agent in history—a Tory working for the British, and her opposite number, Lydia

"Don't miss this book—not a dull paragraph."

Darragh, a Quaker housewife who slipped military intelligence to Gen Washington inside the buttons of her young son's coat.

Don't miss this book. It is chock full of lessons for today's intelligence officers—lessons that may be applied right here and now. Fundamentally, espionage methods haven't changed very much since Gen Washington's Director General of hospitals collected highly secret information and fed it to the British in Boston for a price.

Reviewed by E. A. Dieckmann, Sr.

STRATEGY

B. H. LIDDELL HART. Frederick A. Praeger, Inc. \$5.95

Written by one of the world's leading military theorists, this book is a valuable asset to any officer's basic professional library. The thought-provoking nature of Capt Liddell Hart's analysis of military history and the soundness of his conclusions are attested by the fact that this is the book's third printing.

The author is probably more familiar to GAZETTE readers through many articles in our publication (See page 14 for his latest).

Liddell Hart has been both damned and praised for his theories

on military history and the art of warfare. In arriving at your own conclusion, consider the following quotes from *Strategy* in the light of our current Marine Corps doctrine. In discussing the German tactics of WWI he comments on the concept of unit separation: "The knowledge brings confirmation of two historical lessons—that a joint is the most sensitive and profitable point of attack, and that a penetration between two forces or units is more dangerous if they are assembled shoulder to shoulder than if they are separated and organically separate."

Again in the Preface he sets forth his views on the use of hydrogen weapons in the struggle against Russia. "The H-bomb is more handicap than help to the policy of containment. . . . for the 'containment' of the menace we now become more dependent on 'conventional weapons.' That conclusion, however, does not mean that we must fall back on conventional methods. It should be an incentive to the development of newer ones."

Certainly Liddell Hart's continual emphasis on "the strategy of the indirect approach" bears thoughtful consideration when faced with the mass tactics of the Chinese in Korea and the vast numerical superiority of our potential enemies.

Reviewed by Col H. D. Pratt

FLATTOP

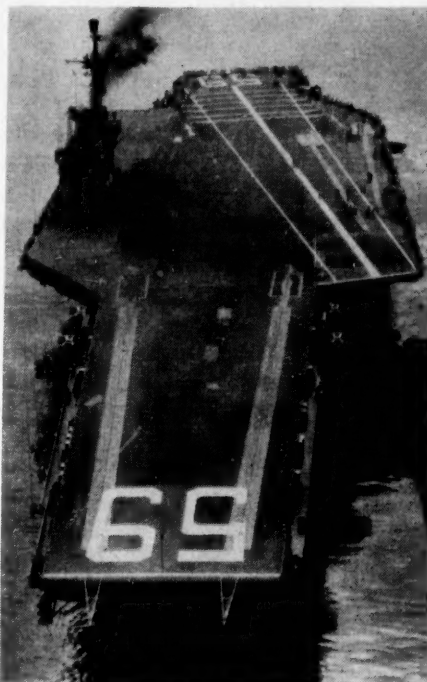
BARRETT GALLAGHER. 128 pages, illustrated; Doubleday, Garden City. \$5.95

A Foreword by Adm Arleigh Burke, CNO, leads off this interesting pictorial essay on the US Navy's aircraft carriers. Beginning with WWII operations the presentation carries on through to the advent of

An interesting pictorial essay.

the atomic-powered carrier. The author, a professional magazine photographer and writer, served as a naval officer during WWII. This volume reflects his professional ability. With but two exceptions, all photos were made by the author. Consequently the book avoids the sameness of picture books made up from official pictures. The photos are well selected and captioned. These are adequately varied to give a good idea of carrier operations.

The author's text is supplemented by some thoughtful professional comments by such famous carrier admirals as Brown, Wright, Pirie, and Johnson. Of particular interest to Marine readers will be the comment by Gen Shepherd emphasizing



the importance of carrier operations in the Korean War. This book is not a history in the ordinary sense of the word. Rather it is a review of the developing importance of the aircraft carrier. The use of carriers in extending and lending flexibility to our striking power, as well as in antisubmarine warfare, makes these ships worth some study. Critics of the aircraft carrier would do well to look at this book and to pay particular attention to the remarks by Adm Burke and Gen Shepherd.

Reviewed by LtCol R. H. Rankin

MR. LINCOLN'S GENERAL, U. S. GRANT

EDITED BY ROY MEREDITH. 252 pages. E. P. Dutton and Company, N. Y. \$6.95

THEY WHO FOUGHT HERE

BELL IRVIN WILEY. 273 pages. MacMillan Company, N. Y. \$10.00

Both books are musts for the Civil War student whether a seasoned Senior School graduate, or a beginner in Basic School.

To know the real Grant takes reading his diary: "I never ranked Lee as high as some others of the

army, that is to say, I never had as much anxiety when he was in my front as when Joe Johnston was in front." To know the real Grant—the inside story—read *Mr. Lincoln's General, U. S. Grant*.

In this book we explore the masterful mind and sobering thoughts of a truly great fighting general, one with whom, unfortunately, the word "sober" is seldom associated.

The editor is an authoritative, much-published writer on Lincoln, Brady, and other Civil War personalities. Roy Meredith combines excerpts from Grant's *Personal Memoirs* with more than 300 illustrations (many rare and unpublished Bradys) which add body and insight to the mental pictures conjured by Grant's own hand.

A specific purpose of the book is to correct a popular opinion—shared by many, but which Editor Meredith says is unfounded—that Grant was a "drunkard, a butcher and a bungler."

For the Marine, it offers further study of one of history's real masters of "combined warfare," the man who took Forts Henry and Donelson and the City of Vicksburg.

Wiley's book, *They Who Fought Here*, is essentially a portable museum, a summation of highly readable facts and figures on the War Between the States. These are supported by 162 fine, glossy prints which provide outstanding detail, all within the purview of the "four staff sections."

It ranges the "1" and "2" fields far and wide, covering both sides: number of troops, job backgrounds, their reasons for fighting, and how they went about getting in uniform (nearly 120,000 of 150,000 Northerners drafted for service were actually hired substitutes).

A thorough study of the "4" situation unearths information on short rations: "I was usually so hungry I could eat a rider off his horse and snap at the stirrups."

A chapter devoted to the "3" side of the war weaves a spell of tactics and deeds that will hold salty old Marines and neophyte future generals alike.

Summing up: a military library would be incomplete without both these books on its shelves.

Reviewed by Maj W. J. Davis



OBSERVATION POST

This department is for new, constructive ideas. They may be controversial; they must be short. Payment at regular rates on publication. Maximum, 60 dollars.



==Getting in the Stork Club Without a Tie==

By AMSgt Joe Dodd

☛ IT'S THE TRUTH—MARINES ARE SLOWLY but surely losing their identity.

They're becoming lost in a field of wheat-colored khaki and a forest of green.

At 20 paces Marines wearing summer service "A" are as indistinguishable from the Brand "X" fighting man as peas are from corn in unlabeled cans.

And since the Army has come out with their "greens" and more and more green-clad Texaco servicemen are manning their pumps the problem becomes more acute. It's getting so you can't see the forest green for the trees.

The solution: Dress Blues. Buy them and wear them. Not just on 10 November. Not just for color guards. Not just for funerals or weddings. Wear them every darn chance you get. Make up reasons to wear them off the post.

As a badge of identity Dress Blues are unbeatable. The public's image of a Marine is still a tall, clean-cut hard-as-nails fellow in a classy blue uniform with a red stripe down the seams of the pants. Why are Marines, particularly staff NCOs, destroying this image? Why do they resist wearing a unique, authentic, unmistakable label?

Here are a couple of examples I think will point up the association that civilians have with Marines and Dress Blues:

A few years ago a letter from a mother in Louisville, Ky., landed in my "in" basket at Cherry Point. She wrote that her 5-year-old son was about to go to the hospital for surgery. She said he was nuts about Marines. (Daddy was stationed at Cherry Point for a spell in 1943, which explains why the letter was sent there, also, perhaps, why the kid liked Marines.) What this mother was seeking was a Marine uniform for her boy to give him courage for the ordeal ahead—specifically, a "suit of Blues."

The MX didn't stock Blues, neither did Supply. Not in size 5, anyway. The exchange officer, Maj Bob Baker (last heard of stationed at El Toro), did, out of pocket, send the boy a child's size

utility uniform which the MX did stock.

Not good enough, wailed the return letter. Her boy wanted a "Marine uniform." Well, by the time a parachute rigger got a size 36 set of Blues cut down, the boy was home from the hospital still hollering for a "Marine uniform." His mother said he stuck up his nose at: a) a cowboy suit, b) a space helmet and c) a jacket home-tailored from his daddy's *old green blouse*.

This kid knew what he wanted, and what he wanted was a Marine uniform. He got it. When the cut-down Blues finally arrived he put them on and started acting like a Marine. The trouble was, said his mother, he started acting like a Marine top sergeant. "He wanted to give the orders. We went along until he started sending us to bed at 2100 and holding reveille before sun-up."



She finally straightened him out by locking up his Marine uniform in a closet. How she got it off him is a story in itself.

Example No. 2 occurred in 1946, at the Philadelphia Navy Yard. All of us Marines were measured for Blues and became the first unit to get the post-WWII free issue. But I, too, demurred at walking down Spruce Street into the Westbury Bar and Grille looking like a "sea-goin' bellhop." In six months I wore the Blues twice: once when Slim Brant retired on 30-and-a-third, and again when Pappy Blumke married a waitress from Orsatti's. Other than that those Blues that fit so well hung limp in my locker.

Then one day while wearing civvies I got the old heave-ho (genteelly, of course—how else in Philly?) from the

Warwick Hotel's plush bar. Being tieless in a plaid sport shirt I was declared "out of uniform." Apparently, their rule was: you got to have a tie on to tie on one.

"I'll be back in 30 minutes," I told my friendly tosser-outer. "Without a tie, too."

"Then you don't get in, sonny," he promised, still cheerful.

I was back in 27 minutes, wearing Dress Blues with buttons that sparkled better than the double row of martini glasses along the back bar.

"Come in, Marine," the same man says. "Have a drink on the house." Right here one must realize that the Warwick buys a drink every time Pennsylvania gets a Democrat for governor. There's been one in the last 25 years.

The man could see I wasn't wearing a tie—not with Blues—so I chided him: "What about your rule?" I says.

"Oh," he says, "that rule's not for Marines. I can see right off you're a Marine."

There is not a doubt in my mind but what the same ruse would work in the Stork Club. Identity—that's what Blues give you.

Okay. So maybe you're convinced. Maybe you're ready to wear Blues but don't have any. Will there be another free issue? You might say the issue is in doubt, what with so much money going for missiles and such.

Then why not buy a set of Blues? Aren't Blues—at least partly—the mark of a Marine? Look around you. See any Blues? Not as many as you did in 1941, and how many more staff NCOs are there now?

A one-pair-of-pants outfit in long-wearing gabardine, complete with accessories—waist plate, cap cover, white belt, gloves and gilt emblems—goes for \$41.05 (Slightly higher at Sears, Roebuck).

Isn't that a small price to buy back your identity?

As a matter of fact, you might be able to do better than that. I've got a couple of extra sets left over from a tour of recruiting duty. Size 38.

USMC
HqBn
MCS Quantico

When the Gas Tank's Dry

By LtCol R. B. Loudoun, RM

*"The Grand old Duke of York,
He had ten thousand men—
He marched them up to the top of
the hill
And he marched them down again.
And when they were up, they were up,
And when they were down, they
were down,
And when they were only half way up
They were neither up nor down."*

—Anon.

THE GRAND OLD DUKE OF YORK MAY not have achieved much, but at least his troops could march and, in more skillful hands, this has been a great asset to a commander throughout the history of war. From Alexander to Napoleon, from Jackson to Wingate, the ability to footslog has been of paramount importance time and again.

Has this any relevance today? Or have rotors and wheels replaced feet? (I never could concede that an army marched on its stomach). And if it has any relevance, have we this foot mobility?

Limitations of visibility, weather and vulnerability of mechanical conveyances on the battlefield convince me that "crunchy" is still an apt nickname. The additional ability to achieve surprise given to a commander whose men can march—and fight at the end of it—is not to be gainsaid. I do not suggest that an ability to march makes vehicles or helicopters unnecessary. It is purely an alternative means of mobility—or should we call it the primary one?—to be used when other means are not available. In conditions of low visibility, or when enemy detection and defensive fire make helicopters unusable and when terrain is unsuitable for vehicles, then, with foot mobility, a commander may still maneuver to gain surprise. Or he may wish to use movement on foot in preference to other means of mobility to gain surprise in this way.

We learned from the Japanese early in WWII that no terrain was an obstacle to tough, well-trained troops. The fall of Singapore in February 1942 shattered the myth of "impassable" jungle. The movement of troops on foot is comparatively noiseless, and in close country or low visibility, difficult to detect.

With the wide dispersion of troops on tomorrow's battlefields this will be a factor we must reckon with. At the present time I venture to suggest that

attempts at foot movement, on any appreciable scale, would come as much of a surprise to our own troops as to the enemy. But a landing at an unexpected point on a coast by covert means, movement through "impassable" terrain in order to surprise an otherwise well prepared enemy, may still have an application in future wars.

Browsing through a book recently I came across some examples of "foot mobility" which I quote below:

"Under Major Byng . . . (they) accomplished eighty miles in thirty-six hours . . . (Then), finding that the enemy had eluded them, they continued their pursuit after a short rest, and, marching twenty-eight miles more, overtook and defeated him. . . ."

* * *

"Brigadier Park, with a flying column, marched two hundred and forty miles in nine days, on the last of which he had to thread his way through a thick jungle, and then fought and defeated the enemy."

* * *

"Colonel Holmes, with a few Infantry and Artillerymen, marched sixty-four miles in a little more than twenty-four hours across a sandy desert, surprised the rebels and beat them."

* * *

"Brigadier Bonner accomplished one hundred and forty-five miles in four days, and Brigadier Somerset two hundred and thirty miles in nine days."

* * *

These exploits all concern the British Army in India in the middle of the 19th Century. When one remembers the weather conditions and the cumbersome, heavy equipment of those days, one begins to wonder . . . are we becoming effete? . . . are modern standards of living reducing our capability for physical endurance?

The fact is that we just do not walk as much as our grandfathers did. Animals develop according to their environment—are we faced with a steady decline in the power of our legs from generation to generation until our lower limbs are but a reminder that we once had legs to travel on? Perish the thought! But we are undoubtedly faced, in the services of the Western Allies, with a physically less tough and mobile material than was Napoleon, Wellington or Grant. I believe it is of prime importance to combat this "de-

cline" in some way—particularly as our likely aggressor is not as affected by this by-product of a high standard of living as we are. It would be wrong to set ourselves standards similar to those I have quoted—initially at any rate—but challenging standards we should have.

I remember becoming interested in this matter of marching early in WWII and, with a party of 30, set out to see how far we could march in battle order in 24 hours, with only short halts. Seven of us stayed the pace and we covered some 65 miles—finishing spread over a mile of road and in no condition to fight.

How far can we march our units today, get them there intact and have them fit to fight? Twenty miles at a maximum I would guess—and that not without stragglers for one reason or another. And could we do this for more than one day at a time? Probably only with a saddening loss in fighting ability.

In the Royal Marines recruit training we concentrate much on marching at speed and on endurance, both on roads and across country. On roads we aim to do a mile in ten minutes up to a distance of 12 miles, and across country 32 miles in under eight hours. The Commando Brigade, stationed in the Mediterranean area, does many exercises involving long marches across difficult country and in high temperatures, but they do not aim as high as the standards we set in our early training. I do not believe this is enough. What standard should we set our units? I would like to see any unit able to march a steady 20 miles a day without prior warning—say a standard of 150 miles in seven days—and be fit to fight at the end of it. In addition a unit must also be able to cover shorter distances at greater speeds—say ten miles in two hours.

These standards will add much to an already overburdened training syllabus, both for recruits and for field units. But the morale bonus to be gained by individual and unit achievement of this nature cannot be overestimated and will well repay the administrative trouble and inconvenience involved. Anyhow, do we not tend to spend too much time on technical and theoretical training at present?

With a marching capability of the order described we could justifiably claim to have "foot mobility". But let us be objective about it . . . budding "Dukes of York" should be discouraged.

USMC

MCEC
MCS, Quantico



OBSERVATION POST

CONTINUED

Sacks, Packs and Packrats

By Capt Paul E. Pearson

THOSE OF US WHO ARE SLAVING AWAY in Marine Corps Equipment Board were somewhat amused by *Haversack, Hava Yes* (OBSERVATION POST, Dec '59), but it also touched a couple of sore spots.

The main thing we're trying to do is lighten the load of the fighting Marine. The top limit is 55 pounds marching load, 40 pounds fighting load. US Army

and *Wehrmacht* physiological stress studies confirm that an average (160-lb) man can handle this much efficiently—if he's in condition.

Everything the Marine wears or carries counts. The best approach is to scrap less essential items. We keep after this goal.

The next best saving is to combine

two new items into one. The load-carrying Battle Jerkin is an example. We're field testing this now as a possible replacement for the pack (MCP M1941). Another approach is to combine a new item with an old one. This may save money, but not much weight.

Capt Clapper will be glad to know many of us share his admiration for the packboards. FMF Units at the Marine Corps Cold Weather Training Center use the board and the rubber bag. Instructors there are studying better ways to attach and detach the bags, although comm wire still works. We are keeping the packboard; it is on hand.

Incidentally, I've been told that the Marine Corps Pack (MCP M1941), *Haversack*, was designed by none other than the late Gunny Lou Diamond. Whoever it was, had in mind hot, wet climates (probably Nicaragua). It wouldn't carry the cold weather gear needed for Korea. In a cold, wet climate, we figure, Marines would need to augment the Battle Jerkin with a packboard or even a rucksack!

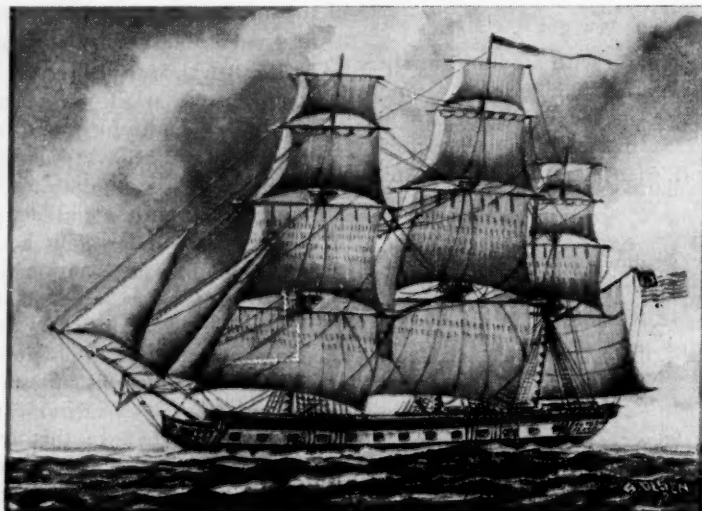
This involves center of gravity. Your center of gravity with a haversack nestled on your shoulders, is high. The rucksack carries near your hips. With the packboard you can move the ledge and choose a high or low center of gravity. Now I don't yodel, but the Swiss have a reason for the low-slung rucksack. First, it's not supposed to carry more than 40 pounds. Second, in either skiing or mountain climbing, your center of gravity and your nose-to-ground clearance had better be low—and stay low. Ergo, the rucksack

We think commanders ought to emphasize rigid weight limits in training. Trying to control natural packrat-ism while using packboards would be like enrolling at Vassar to forget women. It's a losing game.

One final word. Never fear that huge stocks of the MCP M1941 will forever saddle Marines. We're using up 60,000 a year; cost: \$200,000. There's no oversupply. In the meantime, we're holding the sack on replacing the pack. We're working on it, but if you have a constructive idea, write the *GAZETTE*, the Development Center, or both. USMC

Ed: A more detailed article about test programs in this field is being prepared for the *GAZETTE*.

General Equipment Bd
MCEB, MCS, Quantico, Va.



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Mobilize and Mix

By Capt C. A. Boyd, Jr.

ASIDE FROM THEIR I&I STAFF, Reserve Marines work only with other reservists. This is a big disadvantage. They don't have the chance to learn the little tricks of the trade that are picked up by men who work at their profession every day. Reserves work only with their own officers and NCOs. If they are good, this is a blessing. If not, errors tend to perpetuate themselves.

How can we integrate Reserves into FMF units without disrupting training schedules or causing the FMF to assume an administrative load too heavy to bear?

The possibility of attaching Reserve companies to "budget" strength battalions has been considered and discarded for a variety of reasons. Primarily, the T/O in a Reserve unit isn't always complete. Some are so understrength by the time they reach summer camp they aren't much larger than a platoon. What about mobilizing a percentage of reservists each summer and attaching them to an FMF unit as individuals? This presented far too many administrative problems for everyone.

A proposed solution is this: Initiate a mock mobilization of selected Reserve units going to summer camp. Go through the very same procedure we intend to use if we effect actual mobilization. Set up MOB Stations, issue orders, conduct examinations.

When these Marines arrive at Camp Lejeune or Camp Pendleton, process them just as we would in case of mobilization. Organize a provisional battalion or regiment and man it with these Reserve units. Let the leaders face men who don't have home town faces, and

let the troops and NCOs learn new techniques from the variety of experienced men they will find in the new unit.

The first day of training will be taken up by mobilization. The remainder of the week can be used for company and battalion problems.

The first four days of the second week could be spent working directly with FMF units. One provisional battalion to a regiment or the provisional regiment as a whole could fill in for the FMF regiment in Vieques or the Mediterranean. Provisional companies could also be assigned to a regular battalion to make up the fourth company if desired. The final day could be spent holding a parade and military field day.

Here is an opportunity for reserves and regulars to work together in ways that will benefit both without tying up FMF units or taking away the cohesiveness of the Reserves.

This system also gives the Marine Reserve program an opportunity to use many of its senior officers in actual com-

mand and staff billets. Many of these officers have a limited opportunity to keep abreast of modern tactical innovations.

By mobilizing a battalion or regiment of Reserves each summer training period and sending the remaining Reserve units to regular summer camp, we would soon have every part of the Reserve program aware of many of our mobilization problems. Solutions would be in the making.

The Fleet Marine Force would be able to conduct an excellent four-day regimental or division problem without facing the slim ranks caused by detachments to Vieques, the Mediterranean and Camp Perry.

The Reserve Marine could benefit greatly by periodically (every third annual field training period) associating with new leaders, by serving in a T/O unit, and by observing and working with FMF Marines.

By mobilizing a portion of the Marine Corps Reserves each year, we will all solve many of the problems, both tactical and administrative, that we will face very abruptly in case of actual mobilization.

USMC

7thInfCo, USMCR
Louisville, Ky.

R. I. P.

By LtCol W. F. Frank, Ret.

HR 4413, THE "HUMP BILL", WILL probably be remembered primarily as the headstone of tombstone promotions. Certainly more emotional outburst has been heard on the loss of this non-selected promotion feature of the law than on the untimely loss of experienced officers as directed by the law. It appears that the purpose of selection for promotion has been obscured or perhaps misunderstood, and it may be worthwhile to review this conflict.

Promotion brings with it assignment to positions of increasing responsibilities. This means that the normal selection system is (or should be) based upon evidence of demonstrated ability or discernible potential to perform the duties of the next higher rank, not on how well present and past duties of the currently held rank have been performed. This potential is exhibited in such ways as actual performance in a position of higher rank, by contributions to the solution of problems arising at the higher level, and in development of future concepts. Said another way: it is the demonstration of capacity to grow mentally and morally.

The tombstone promotion system has

often permitted an officer who failed of selection in the normal manner to achieve the same rank and prestige as his compatriots who did not fail of selection. Granted the increase in pay was not forthcoming. The basis for the tombstone promotion is a heroic deed in combat for which the officer was quite properly awarded an appropriate symbol at the time, a medal for valor and, on occasion, a promotion. Continuance of this tombstone system would result in an increasing number of retired officers holding a rank in which they had never served nor for which had they discharged the responsibilities.

The tombstone has been a privilege, and not a right. As when any privilege is closed down—like a gate—those left outside appear unfairly had. This is not true. Those medals of valor were given in recognition of responsibilities carried at the time. To assure the dignity and honor of selection, promotion must continue to evince confidence in potential for future service to the country. The past should assume its rightful place proudly, thankfully and graciously.

USMC

Fairfax, Va.

A TIP TO TIPSTERS

Observation Post needs practical "how-to-do-it" tips from the field. Sketches or pictures of field expedients are desired, with brief explanations of 500 words or less. Payment at regular rates. Published ideas will be noted by the Marine Corps Landing Force Development Center; they may also be submitted in accord with Para 17, MCO 3900.2A, to insure official consideration.



OBSERVATION POST

CONTINUED

Pep Pills for Training

By Maj Victor A. Salvo

INDIVIDUAL TRAINING PROGRAMS ARE rarely given hearty support, and, frequently, those who need this training most are the ones most often excused by their unit commanders or section heads. Occasionally you find instructors with enthusiasm or proper motivation. More rare are students with this kind of motivation.

Too often, those assigned to carry out the training program are concerned only with having a good program on paper, with well prepared training schedules. Of course, the main thought—if not purpose—is to pass inspections.

Another weakness is transfers. Lack of Corps-wide coordination in training too often results in much repetition and considerable omission in a training year.

Now to offer a solution. Combine the annual training program with requalifi-

cation. The entire program could be conducted in a three-week period.

Devote the first week entirely to required training and include considerable night training. In the second week devote a half day to the training program and the other half to preliminary marksmanship. The final week would be devoted wholly to requalification firing.

A program such as this would provide about 75 hours of training, emphasizing field work, practical application and night training. Each training-requalification detail would have sufficient officers and non-commissioned officers assigned to it to conduct the training, thus no additional personnel would be needed.

Each unit should be required to complete training for a certain percentage

of its command according to a schedule—25 per cent completed by the end of the first quarter, 50 per cent by the end of the second quarter.

Personnel most likely to be transferred should be scheduled first. After the end of the second quarter, units would be required to complete, prior to transfer, the training-requalification of all personnel transferred from the unit.

Only in unusual circumstances would this requirement be waived. Personnel transferred from an FMF infantry unit would be excused in the calendar year in which they leave the infantry unit. Personnel excused from annual requalification firing would be required to utilize self study courses. Other personnel from small detachments who requalify at larger posts or stations would participate when they requalify.

This would minimize the amount of time needed for those subjects not included in this program. Such subjects would be drill, motor vehicle accident prevention, information programs and inspections. These could be adequately covered in an hour and a half a week. This could be accomplished by adding an extra hour to the work schedule on certain days or, more desirably, taken from normal working hours.

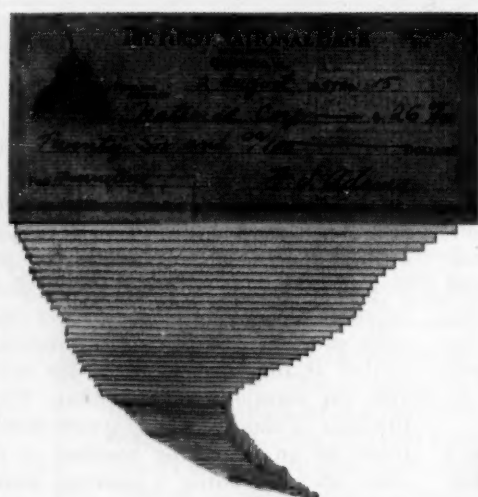
We can plan ahead and accomplish the training when most convenient for the individual and the section. We know that once training is completed, we will not be harassed for attendance at training the remainder of the year.

More physical activity and change of routine should return him to the job with renewed vim and vigor. Finally, he is better prepared for those semi-annual GMST examinations, which will better his chances for promotion and, in turn, give us a still more valuable Marine, in many cases another career man.

In summary, if a Marine must be qualified for field duty, (and he must be if we are to remain a force-in-readiness), something must be done to maintain his proficiency. The present, oft-times inadequate, poorly presented and poorly received training program must be replaced by something that will do the job.

USMC

H&S Co, 1st ITR
MCB, Camp Lejeune



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Still Shooting It Out

By Capt T. L. Curtis

ASSGT H. C. PUCKETT'S ARTICLE, *Why Not a Shoot-out?*, (*Observation Post*: Oct '59) is another of those articles recommending elimination of the .45 caliber pistol. This subject has been blasted around for years, and someone always remarks, "Why don't we adopt a revolver? It's easier to handle."

Hawgwash! I'd be willing to put money on the line that it's easier to teach a Marine accurate rapid fire shooting with a pistol than it would be with a revolver. Double-action revolver shooting, except by TV sheriffs or at 15 or 20-foot ranges, just isn't practical.

The fault of the .45 is not the gun's. It is a combination of many deficiencies, mostly human. Some of these are:

- a) negative thinking;
- b) inexperience;
- c) lack of interest;
- d) insufficient time;
- e) laziness.

On the mechanical side, admittedly there are minor improvements that would improve the .45:

- 1) Better sights. A micro rear sight and ramp front sight.
- 2) Improved trigger. Adjustable for long or short pull and weight not over 4½ pounds.

The human element that contributes to poor pistol shooting is psychological. On the first trip to the pistol range someone usually introduced the .45 as "the most dangerous, cantankerous, obstinate, lousiest, worst-shooting hunk of iron you'll ever have in your hand." And what is the neophyte shooter's reaction? He's scared to death before he handles it. How is he ever going to conquer this weapon if his introduction to it begins with this kind of negative thinking?

Years ago I was introduced to the .45 by an old-time shooter, nicknamed "Hardluck" Arnold. His introduction was something on this order:

"Do you know how much this pistol weighs?" This was followed with the question, "How much do you weigh?" The difference amounted to something like 2,994 ounces. This was real psychology, and it worked. If memory serves me well, I was a pistol sharpshooter in boot camp.

It is approaching the time, after almost 60 years, that we accept the fact that the .45 has been adopted as the sidearm of the Marine Corps. Instead of continually complaining about its deficiencies, all hands should learn its capabilities.

USMC

1st Rifle Co., USMCR
Springfield, Mass.

By ASSgt H. G. Preflatish

BECAUSE THE .45 IS AN OLD, DEPENDABLE friend and guns and reloading have been my hobby for the past 14 years, I would like to reply to ASSgt H. C. Puckett.

In his comparison, he says the .45 is a "loose, heavy and awkward weapon in conjunction with ammunition of poor ballistics." He later makes mention of the "greater velocity" of the .38. Let's consider these for a moment.

The .38 Special, 158-grain bullet (this weight would have to be used in combat over a lighter one) has a muzzle velocity of 885 feet a second and a muzzle energy of 236 foot-pounds. Compare this to the .45's muzzle velocity of 800 feet a second and energy of 369 foot-pounds generated by the fat 230-grain slug. The .38 has greater velocity, yes. But it is not velocity but energy that is directly related to killing power. Although velocity is connected with energy, bullet weight and diameter mean a great deal.

Officers and men in the Philippine Campaign were ordering the old single-action .45 Peacemaker in order to get the bigger slug. Not just one or two of

the enemy, but too many were still standing after being hit with the .38 and as often as not were able to kill or maim the unlucky soldier armed with it.

Is the .45 automatic harder to shoot? Of course it is. Greater recoil and muzzle blast are the big problems, but, men, we're not issued a pistol for match competition. Don't forget, it is much easier to learn to shoot the .22 pistol or revolver and less expensive. But these aren't combat weapons.

ASSgt Puckett's statement that leaving a magazine loaded weakens the follower spring doesn't jibe with my own experience. I have owned and fired my personal .45 automatic for the past eight years. I have several magazines that are loaded at all times and have yet to experience a malfunction due to a weak follower spring.

As for adjustable sights, the ranges at which a pistol would be used in combat do not present a need for anything more than fixed sights. Adjustable sights on a pistol are too delicate for combat.

Sure, I shoot better scores with the .38. But in a foxhole, a dark bunker or on a narrow path, I want the ugly, parkerized man-stopper. Let's keep it!

USMC

25 Morehead Ct.
Havelock, N. C.

Needed: 37" Yardsticks

By LtCol George P. Wolf, Jr.

THE INTERVIEW EVALUATION FORM used with the Limited Duty and Warrant Officer programs (MCO 1040.12, 1040.14 and 1040.15) needs revision. The form should provide a broader scale or rating yardstick to aid local interview boards in evaluating candidates.

As chairman of several local interview boards, I sat in on the interviews with more than 50 candidates for the LDO and WO programs.

Few individuals can be honestly and accurately rated in the right hand column. The rating qualifications are stated in such superlative terms that no one measures up.

For instance, "... thoroughly grounded in MarCorps organization, mission and relation to DOD and other services; well informed on organization of the Defense organization of the Defense Estab.; keenly aware of human relationships and shows a real understanding of them; well read on civilian enterprise related to his military duties; exceptionally well informed on current events as they affect the Federal Govt. including international relations."

The rating qualifications as stated for marking in the left hand column go to the other extreme. Few individuals applying for these programs leave such a poor impression that they can honestly be rated in the left hand column.

Since the interview form provides only three positions for marking under each rating factor, local interview boards feel they must rate the individual down the middle to be fair.

Rating factors used on the Interview Evaluation Form are good. However, each needs a rating scale of nine to eleven rating positions. Each should be carefully supported by concise rating qualifications, briefly stated in an ascending order. With this broader yardstick the local interview board can spread the individuals across the scale in accordance with their "interview impression." This would allow them honestly and effectively to separate the "men from the boys" in the interests of a better-qualified Marine officer corps.

USMC

Hq
MCB, 29 Palms

THE GAZETTE GLOSSARY

Our new section, *Marine Corps 1960*, is cramped for space. We must abbreviate. Further, the *GAZETTE* goes to some 2,000 college students and another 2,000 non-Marines. So, herewith, a glossary of abbreviations used in this issue:

ABC Atomic, biological and chemical
CAP Combat air patrol
CDL Deceptive code name derived from "canal defense light"—actually a British tank fitted w/searchlight
CONARC Continental Army Command (Ft. Monroe, Va.)
CWTC Cold weather training command
DASC Direct air support center
DOD Department of Defense
ERDL Engineer Research and Development Laboratory (Ft. Belvoir, Va.)
FMCR Fleet Marine Corps Reserve
FSCC Fire support coordination center
G-2 Division/Wing staff section (Intelligence)
G-3 Division/Wing staff section (Operations)
GMST General military subjects test
HD Helicopter direction
HDC Helicopter direction center
HF High Frequency
HMX Marine experimental helicopter squadron
IFR In-Flight Refueling; Instrument Flight Regulation
JO Journalist (Navy); also, Junior Officer
MARTCOM Marine Air Reserve Training Command
MCLFDC Marine Corps Landing Force Development Center
MCRRD Marine Corps Reserve and Recruitment District
MCA Marine Corps Association
MCB Marine Corps Bulletin
MCO Marine Corps Order
MHF-HF Medium high frequency/High Frequency
MOS Military occupational specialty
MTO Motor transport officer
NATO North Atlantic Treaty Organization
NAVPERS Navy Order to all naval personnel
NROTC Naval Reserve Officers Training Corps
NSLI National Service Life Insurance
OCS Officer candidate school
PD Physical disability
RADFAC Radiating Facility For Aircraft Flight Line Testing
R&D Research and Development
RM Royal (British) Marines
UHF Ultrahigh Frequency
VHF Very high Frequency
R.I.P. Rest in Peace

THE SCHOOL SOLUTION

(Answers to questions on page 50)

1 (d) Reference: FM 31-50, paragraph 39. Direct fire weapons deliver the most effective fires in the attack of a fortified position. These weapons support the advancing troops by neutralizing the fire from bunkers.

2 (b) Reference: MCS 3-31, paragraph 34a. Although (a), (c) and (d) are factors which must be taken into consideration when selecting a patrol leader, the purpose, or mission, of the patrol is paramount. The nature of the patrol frequently dictates the type Marine to be placed in charge.

3 (b) Reference: MCS 2-103, paragraph 14. The frequency coverage of AN/PRC-8: 20 to 27.9 mc; of AN/PRC-9: 27 to 38.9 mc; of AN/PRC-10: 38 to 54.9 mc. The range, weight, and power source of all three sets are the same.

4 (a) Reference: TIP (ADM)-4, paragraph 10a. The present T/O does not provide sufficient personnel for the Main Command Group to be divided into two echelons; therefore, distractors (b) and (d) are incorrect. Tactical control cannot be exercised from the Administrative CP because of its relative remoteness from the battlefield and lack of adequate communications.

5 (c) Reference: SM-28, Section 3, paragraph 21. The Quartermaster General of the Marine Corps is appointed by the President with the advice and consent of the Senate and is responsible to the Commandant for the Marine Corps Supply System.

6 (a) Reference: TIP (LOG)-1, paragraph 34e (2) (b). Supplies in LSA are kept to the minimum necessary to sustain the operation.

7 (b) Reference: TIP (LOG)-1, paragraph 11b. The landing support company, augmented as necessary, is usually task organized as a shore party group. It functions as part of the division shore party. It prepares, marks, controls and coordinates logistic operations on the landing beaches, locates and establishes multi-class dumps in the beach support area, and coordinates

the evacuation of casualties across the beaches. Platoons of the company, reinforced as necessary, are organized as shore party teams. This is the basic unit for the operation of one landing beach. Depending on the character of the operation, the company may be attached or placed in direct support of a regimental landing team. It is reinforced as necessary to fulfill its assigned mission.

8 (b) Reference: DA Pamphlet 39-1, paragraph 19. Overpressures in the realm of 100 psi are required to cause significant primary blast injuries to personnel. Overpressures of this magnitude are not generally produced. Therefore, primary blast injuries (caused by the direct effect of the blast) are not significant from the point of view of personnel casualties. Protected personnel (in tanks or bunkers) will receive even less direct effect from blast. Unidentified targets is included as a plausible distractor. It is not possible to predict effects when the make-up of the target is not known. Such targets would very likely *not* be selected for a nuclear burst.

9 (d) Reference: LFM 00, paragraph 271c. When the initiating directive is promulgated, planning commences. Planning is generally on a joint basis and command of the landing force as part of the amphibious task force is not assumed by the task force commander until the landing force is embarked.

10 (a) and (c) Reference: SM-4 paragraph 12c. The tank battalion should be assigned defensive missions in which it can use its mobility and shock action to the greatest extent under the existing conditions. These missions include:

- Adding strength to the counterattack.
- Adding depth to anti-mechanized operations.
- Acting as a part of the general outpost.

In most cases the tank battalion can best assist in the defense by the employment of offensive tactics. Every effort must be made to avoid static positioning or emplacement of the tank battalion or its subordinate elements.

Marine Corps 1960

Leaders of the Corps

An unofficial digest
of orders and news
of Marine leaders.

MARINE CORPS GENERAL OFFICERS ON ACTIVE DUTY

Gen David M. Shoup — Commandant of the Marine Corps
LtGen Joseph C. Burger — CG, FMFLant
LtGen Edward W. Snedeker — CMCS, Quant
LtGen Thomas A. Wornham — CG, FMFPac
LtGen John C. Munn — Asst CMC
LtGen Wallace M. Greene, Jr. — C/S HQMC
MajGen Samuel S. Jack — CG, AirFMFPac; COMCAB West
MajGen Henry R. Paige — CG, 1stMarDiv
MajGen Marion L. Dawson — CG, AirFMFLant; DC, FMFLant
MajGen Francis M. McAlister — CG, MarPac
MajGen Alan Shapley — CG, MCB, CamPen
MajGen Robert B. Luckey — CG, 3dMarDiv
MajGen Arthur F. Binney — DirAvn; ACNO (MarAvn)
MajGen Thomas G. Ennis — InspGen
MajGen Carson A. Roberts — CG, 3dMAW
MajGen James P. Berkeley — CG, 2dMarDiv
MajGen Donald M. Weller — AC/S, G-1; Manpower Coordinator
MajGen Charles H. Hayes — DC, FMFPac
MajGen August Larson — Director of Personnel
MajGen Richard C. Mangrum — CG, 1stMAW
MajGen Frederick L. Wieseman — DC/S (Plans) HQMC
MajGen Victor H. Krulak — CG, MCRD SDiego
BGen Chester R. Allen — Quartermaster General
BGen Harold D. Hansen — Dir Material Div., SupDept
BGen Edward A. Montgomery — J-3, CINCPAC
BGen Ronald D. Salmon — Sk, USNH, CamPen
BGen Lewis C. Hudson — AC/S, G-3
BGen George R. E. Shell — CG, MCRD, PISC
BGen William P. Battell — CG, MCSC, Albany
BGen George H. Cloud — CG, MCSC, Barstow
BGen Austin R. Brunelli — CG, LFTULant

BGen Alpha L. Bowser — CG, ForTrps FMFPac; CG, MCB, 29 Palms
BGen Harvey C. Tschirgi — AC/S, G-4
BGen Carey A. Randall, (Ret) — Military Asst to Sec Def
BGen Avery R. Kier — Director of Information
BGen Sidney S. Wade — CG, MCB, CamLej
BGen James M. Masters, Sr. — AC/S, G-2
BGen Ralph K. Rottet — CG, MCAS, CherPt; COMCAB EAST
BGen Samuel R. Shaw — CG, LFTUPac
BGen James D. Hittle — Legislative Assist to CMC
BGen John P. Condon — D/J-3 CINCENR
BGen Frank C. Tharin — CG, 2dMAW
BGen Robert E. Cushman, Jr. — Asst (National Security Affairs) to Vice President
BGen Richard G. Weede — CG, 1stMarBrig
BGen Lewis J. Fields — Deputy Dir (Policy) Directorate Plans, Policy J-5, JCS
BGen Leonard F. Chapman, Jr. — CG, ForTrpsLant
BGen Paul R. Tyler — CG, MCSA, Phila
BGen Henry W. Buse, Jr. — MarCor LnO (OP-O9M)
BGen Herman Nickerson, Jr. — Fiscal Director
BGen William J. Van Ryzin — Deputy AC/S, G-3
BGen Raymond L. Murray — ADC, 3dMarDiv
BGen Thomas F. Riley — ADC, 1stMarDiv
BGen Frederick E. Leek — COMART
BGen Odell M. Conoley — ADC, 2dMarDiv
BGen William T. Fairbourn — Director of Reserve
BGen Bruno A. Hochmuth — Prospective AC/S, R&D
BGen Roy L. Kline — AWC, 2dMAW
BGen William R. Collins — Dir MCLFDC, Quant
BGen John C. Miller, Jr. — Dir MCEC, Quant
BGen Louis B. Robertshaw — AWC, 1stMAW

RESERVE GENERAL OFFICERS

Attending the first conference of Reserve Admirals and Marine Corps Reserve Generals last month in Washington, D.C. were:

General Officers, USMCR

BGen Walter A. Churchill, Toledo, Ohio.

General Officers, USMCR (Ret)

LtGen Karl S. Day, Long Island, N.Y.; LtGen Bertrand Fay, Albany, N.Y.; MajGen Littleton Waller, Meadowbrook, Pa.; MajGen Melvin J. Maas, Chevy Chase, Md.; BGen Joseph R. Knowlan, Havertown, Pa.; BGen Carlton A. Fisher, Buffalo, N.Y.; BGen Philip G. Strong, Washing-

ton, D.C.; BGen John W. Scott, Jenkintown, Pa.; BGen Samuel F. Zeiler, Encino, Calif.; BGen Gooderham L. McCormick, Huntington Valley, Pa.; BGen Robert N. Fricke, Richmond, Va.; BGen Arnold Dane, Marblehead, Mass.; and BGen Malcolm Beyer, Long Island, N.Y.

General Officer Selectees, USMCR

Col Charles O. Clark, Dedham, Mass.; Col Charles E. Howarth, Jr., Arlington, Va.; Col William H. Klenke, Jr., Bloomfield Hills, Mich.; Col Harry N. Lyon, Oakland, Calif.; Col George E. Tomlinson, Atlanta, Ga.; Col Harry R. Van Liew, Long Island, N.Y.; and Col John L. Winston, Gladstone, N.J.

★ General Officers ★

Transfers

Hochmuth, B. A. 9903
Fr MCRD SDIEGO EDWDDec
To HQMC By11Jan
Kline, B. L. 9903
Fr HQMC ED1Jan
To 2dMAW

Released from Active Duty
Stickney, W. W. 9903
HQMC ED1Jan

Colonels

Transfers

Bangert, D. A. 9907
Fr MAG-32 ED20Jan
To 2dMAW
Boyd, R. W. 9906
Fr MCRD SDIEGO ED10Jan
To FortTrps, FMFPac By1Feb
Feeley, J. A. 9907
Fr 1stMAW EDWDDJan
To COMCAB, EAST
Moore, J. B. 9907
Fr 1stMAW By4Jan
To HQMC

Retired

Moore, F. R. 9906
PhibFor PacFlt ED31Dec

Recent Command and Staff Assignments

Ashley, P. H., MCAS, Quant
Baker, C. R., Insp., 2dMarDiv
Barnum, A. T., MAG-36, 3dMAW
Classen, W. E., G-3, 3dMAW
Cohn, R. W., MAG-15, 3dMAW
Dobbin, J. F., AWC, 3dMAW
Gorman, J. E., G-2, MCRD, PISC
Gormley, J. J., C/S, 2dMarDiv
Henderson, H. D., 6th Mar, 2dMar-
Div
Hooper, H. B., Jr., MAG-33, 3dMAW
Huizenga, R. M., C/S, 3dMAW
Johnson, R. S., G-3, MCRD, PISC
Karch, F. J., G-3, 2dMarDiv
McKenna, W. J., HqBn, 2dMarDiv
Newton, G. R., C/S, MCRD, SDIEGO
Pace, N. M., H&SBn, MCRD, PISC
Picardi, E. J., G-3, MCRD, SDIEGO
Riche, H. R., 2dITRBn, MCB, Cam-
Pen
Skoczylas, J. S., G-4, 2dMarDiv
West, G. H., G-2/3, MCB, CamLej
Wright, E. A., 2d Mar, 2dMarDiv
Youngdale, C. A., 10th Mar, 2dMar-
Div

★ Lieutenant Colonels ★

Transfers

Blumenstein, J. H. 7304
Fr 1stMAW EDWDDJan
To MCS, Quant
Cochran, R. L. 7335
Fr 1stMAW EDWDDJan
To 2dMAW
Conger, J. E. 7333
Fr Univ Omaha ED31Jan
To 2dMAW
Fields, T. M. 0302
Fr FMFPac EDWDDec
To AFSC, NorVa By5Feb
Fraser, L. S. 0802
Fr 3dMarDiv EDWDDJan
To MCB, CamPen By10Feb
Lowman, J. 7333
Fr 1stMAW EDWDDJan
To 1stMarBrig
McLean, C. T. 0302
Fr FMFPac By20Jan
To CinCSouth
Noren, W. C. 0302
Fr FMFPac EDWDDec
To AFSC, NorVa By5Feb
Severance, D. E. 7307
Fr 3dMAW By25Jan
To ColoSprings, Colo
Sims, W. J. 7302
Fr AFSC, NorVa EDWDDJan
To MCAAS, Yuma, Ariz

Wolf, G. P. 0302
Fr MCB, 29Palms
To MarPac FFT By4Jan
Young, R. L. 7304
Fr 2dMAW
To HQMC By25Jan
Zingheim, C. F. 7335
Fr HQMC ED15Jan
To 1stMAW

Retired

Benson, G. H. 7304
AirFMFPac ED31Dec
Cowles, C. H. 0302
ED1Dec
Eldridge, J. W. 3402
MCSC, Barstow ED31Jan
Nevils, G. W. 7333
AirFMFPac ED31Dec
Willis, L. L. 3002
MCSC, Albany ED31Jan

Permanent Promotions

Brandenburg, P. F. Dec
Tomlinson, J. H. Dec

Temporary Promotions

Bardon, T. J. Dec
McLane, G. E. Dec
Porter, M. B. Dec
Wagner, J. H. Dec

Recent Command and Staff Assignments

Berteling, J. B., VMA-533, 2dMAW
Butcher, W. A., 2/5 (3dMarines)
3dMarDiv
Dalton, C. D., MABS-15, 3dMAW
Grow, L. D., MASS-3, 3dMAW
Hill, E. E., WMRTBn, RTC, PISC
Linnan, J. K., 2/3 (5th Marines),
1stMarDiv
Moses, E. P., 2dMTBn, 2dMarDiv
Patrow, L. L., 1stRTBn, RTC, PISC
Sundholm, J. E., 2dATBn, 2dMarDiv

★ Majors ★

Transfers

Arnold, R. W. 0130
Fr MCB, CamPen By10Jan
To 2dMarDiv
Bednarsky, V. H. 2502
Fr FortTrps, FMFLant EDWDDJan
To FMFPac
Checklon, H. A. 0302
Fr 2dMarDiv By3Jan
To HQMC 7335
Curd, J. D. 0802
Fr 3dMAW By15Jan
To HQMC
Drury, J. W. 0802
Fr FortTrps, FMFPac By15Jan
To MarPac FFT 6402
Dwiggins, W. M. ED1Jan
Fr HQMC
To 2dMAW
Hoit, E. Y. 0302
Fr MCS, Quant By1Jan
To HQMC 0302
Pritchett, C. H. EDWDDec
Fr MB, NAS, CorpC By25Jan
To MarPac FFT 7304
Williams, R. M. EDWDDec
Fr FMFPac
To 1stMAW

Retired

Benjamin, L. W. 3002
NavDept ED31Jan
Brown, W. W. 0130
ED1Dec
Coyne, R. J. 3002
ED1Dec
Heacox, W. J. 6602
ED1Dec
Henry, R. A. 2502
ED1Dec
Potter, E. H. 7304
2dMAW ED31Dec
Strickland, J. G. ED1Jan
Tufts, M. A. ED1Jan
Warren, E. L. ED1Jan
Wilkerson, L. E. ED1Jan

Recent Command and Staff Assignments

Craig, J., 2dAmTracBn
Jefferson, J. M., Jr., 1stReconBn,
1stMarDiv
Johnson, J. K., VMF-333, 2dMAW
McBarron, A., H&MS-24, 2dMAW
Rice, K. M., G-3, RTC, SDIEGO

Captains

Transfers

Bjorklund, D. E. 7302
Fr 1stMAW By4Jan
To HQMC FFT 0302
Bowron, W. F. ED30Jan
Fr FortTrps, FMFPac
To Tsouyng, Taiwan
Cain, J. W. 0802
Fr Monterey, Calif. EDWDDJan
To 3dMarDiv
Cockey, J. M. 0802
Fr 2dMarDiv ED10Jan
To MB, WashDC
Denyer, S. A. 7304
Fr 2dMAW By27Jan
To MCAS, El Toro FFT 0302
Emmons, C. D. By11Jan
Fr MCRD, SDIEGO
To MB, NB, Brem 0302
Emmons, C. D. ED15Jan
Fr MCRD, SDIEGO
To USS GenBarrett FFT 0302
Grattan, R. N. EDWDDec
Fr Monterey, Calif.
To 1stMarDiv
Hutchinson, R. N. 7333
Fr AirFMFPac
To HQMC FFT By4Jan
Lavigne, A. W. 7304
Fr 2dMAW ED15Jan
To MCAAS, Yuma, Ariz
McLaughlin, M. W. 3402
Fr MAD, NATTC, Mfs By30Jan
To 3dMarDiv 0302
Miller, E. F. EDWDDec
Fr 12thMCRD
To 1stMarDiv 7304
Palmer, R. P. By1Jan
Fr 3dMAW 7335
To AirFMFPac FFT ED15Dec
Rupe, D. E. 0130
Fr NAS, Pensla By4Jan
To MCAAS, Beaufort
Sandifer, L. B. 7302
Fr MCB, CamPen ED15Jan
To MarPac FFT
Wauch, D. S. 6602
Fr NAS, CorpC By4Jan
To MCS, Quant
Woodard, R. J. 7304
Fr 3dMAW
To HQMC FFT

Retired

Anderson, W. E. 2710
2dMarDiv ED31Jan
Brown, G. H. 4602
3dMAW ED31Jan
Cormier, C. J. 0802
ED1Dec
Hare, C. P. 0130
ED1Dec
Harris, R. E. ED1Jan
Koste, R. A. 2502
3dMAW ED31Dec
Lahendro, S. A. 3510
ED1Dec
McCutcheon, H. N. 0130
1stMarDiv ED31Dec
Nielsen, J. R. 3060
MCAS, El Toro ED31Jan
Phillips, E. B. ED1Jan
Pressutti, A. 2715
MCRD, SDIEGO ED31Jan

Released from Active Duty

Albritton, J. A. 0202
2dMarDiv ED16Jan
Lambert, K. B. 7333
MCS, Quant ED31Jan

Temporary Promotions

Alison, J. Dec
Beach, B. E. ED9Dec
Bigley, J. F. ED9Dec
Crawford, R. D. Dec
Cronin, J. P. ED9Dec
Eckhardt, W. E. Dec
Halen, J. F. ED9Dec
Hellett, H. R. ED9Dec
Ketner, G. M. Dec
MacLeod, J. L. Dec
Taffin, D. P. ED9Dec
Teeter, T. H. Dec
Wentz, R. W. ED9Dec

1st Lieutenants

Transfers

Barnes, W. D. 6708
Fr 1stMAW
To NAS, Pensla By27Jan
Black, F. R. 0302
Fr 2dMarDiv
To COMFIVE FFT By15Jan
Conaty, D. B. 0302
To COMFIVE FURAS By5Jan
Cook, E. T. 0302
Fr 2dMarDiv
To MarPac FFT By5Jan
Corr, E. L. 0302
Fr 1stMarBrig
To MarPac By5Jan
Cronin, T. J. 7335
Fr 2dMAW
To MCAS, El Toro FFT By29Jan
Drake, C. G. 0302
Fr 1stMarDiv
To MB, NB, Brem By11Jan
Jaczko, E. S. 9901
Fr MCB, CamLej EDWDDec
McCrear, R. B. 7304
Fr 2dMAW
To MCAS, El Toro FFT By27Jan
Raiselis, D. R. 0302
Fr USS F. D. Roosevelt WDJan
To MB, Cecil Field, Fla
Sellers, W. J. 1302
Fr MCAS, El Toro
To NAS, Pensla By27Jan
Sullivan, M. P. 7307
Fr AirFMFPac
To HQMC FFT By4Jan
Whitaker, L. W. 7304
Fr 2dMAW
To MCAS, El Toro FFT By27Jan

Released from Active Duty

Bryn, F. M. 7302
NAS, Pensla ED1Jan
Carmitchel, R. B. 7335
NAS, Pensla ED1Jan
Graven, R. M. 7333
3dMAW ED1Jan
Harris, S. E. 7333
3dMAW ED1Jan
Jeter, W. T. 7333
MARTC, NAS, Mfs ED31Jan

Permanent Promotions

Carr, F. S. Dec
Dublin, W. L. Dec
Hobbs, V. E. Dec
Lewis, C. W. Dec
Martin, J. A. Dec
Fagenkopf, S. W. Dec
Waggoner, K. L. Dec
Wilson, J. W. Dec

Temporary Promotions

Adams, B. R. ED9Dec
Bates, J. E. ED1Dec
Bell, P. B. ED9Dec
Bergschneider, J. L. Dec
Burch, J. E. ED9Dec
Dungan, L. R. ED9Dec
Felton, E. H. ED9Dec
Fuller, J. W. ED9Dec
Hill, N. D. ED9Dec
Kelly, W. E. ED9Dec
Kitchens, J. A. ED9Dec
Liddell, P. H. ED9Dec
Morrow, C. R. Dec
Mulcahy, T. J. ED9Dec
Ojerholm, D. S. ED9Dec
Peterson, G. R. ED9Dec
Robertson, T. E. ED4Dec
Thornton, G. T. Dec
Twidwell, G. E. Dec
Warren, F. L. ED9Dec
Zenda, W. C. ED9Dec

2d Lieutenants

Transfers

Just, F. W. 9901
Fr MCS, Quant EDWDDec
To 3dMarDiv
Ramsay, C. J. 1302
Fr 2dMarDiv By3Jan
To MCS, Quant 7335
Smith, D. B. ED25Jan
Fr NAS, Pensla
To MAG-26
Vindich, J. G. 0302
Fr 1stMarDiv
To NAS, Pensla By27Jan

Commissioned 25th OCC

Abele, W. R., Jr.
 Abernethy, D. L.
 Adair, M.
 Anderson, E. J.
 Anderson, W. T., Jr.
 Andreassen, A. C.
 Andrews, D. W.
 Anthony, R. J.
 Appleyard, W. T.
 Armstrong, D. F.
 Atkinson, E. V.
 Barker, J. L.
 Barker, R. E.
 Barlowe, L. H.
 Bates, A. B.
 Beall, E. B., Jr.
 Bellsnyder, A. L., Jr.
 Bennett, R. H.
 Bishop, J. P.
 Bjork, M. J.
 Blum, R. J.
 Bohlscheld, C. R.
 Bolling, W. G.
 Bomis, M. M.
 Booma, S. C.
 Bradfield, L. P.
 Bragan, D. F.
 Brown, D. O.
 Brown, M. T.
 Brush, T. B.
 Bryden, D. P.
 Bub, R. L.
 Buck, J. A.
 Burke, T. P.
 Bush, F. M.
 Cadiz, D. G.
 Canella, C. E.
 Capozza, A. M.
 Carlson, B. L.
 Carlson, P. L.
 Casper, W. R.
 Cesare, F. V.
 Chambless, B. D.
 Chandler, T. W.
 Channel, W. B.
 Chomentowski, T. C.
 Cirulli, R. J.
 Clancy, J. J.
 Clark, R. M.
 Cliff, G. R.
 Close, P. M.
 Cobble, R. W.
 Colburn, R. D.
 Cole, B. F.
 Coleman, P. L., Jr.
 Collins, F. A.
 Collymore, E. L.
 Compton, D. E.
 Comstock, J. S.
 Connors, D. N.
 Connors, T. N.
 Connelly, E. J., Jr.
 Cook, V. E., II
 Cooper, G. J.
 Cotterman, E. P.
 Cowan, G. H.
 Cummins, C. T.
 Curran, G. S.
 Danksz, E. D.
 Davies, H. N., Jr.
 Davies, L. E.
 Decker, A. W.
 Dempsey, B. L.
 Desmond, R. J.
 Detombe, R. F.
 Deuel, M. M.
 Devlin, H. F., Jr.
 Dickinson, C. C., III
 Dill, L. L.
 Distefano, F. J.
 Donohue, V. R.
 Drake, D. A.
 Driskell, J. M.
 Driver, R. J., Jr.
 Droze, H. D., Jr.
 Duclos, D. L.
 Duggan, A. J.
 Durand, E. R., Jr.
 Dwyer, J. J., Jr.
 Edmunds, D. H.
 Egan, N. S.
 Ely, J. C.
 Ereneta, W. J.
 Erickson, G. K.
 Evans, G. L., Jr.
 Ewald, R. P.
 Fabend, E. C.
 Fanning, D. E.
 Faris, J. F.

Fava, A. E.
 Feddeler, C. A., Jr.
 Ferguson, D. B.
 Flaherty, J. E.
 Flynn, H. J., Jr.
 Fox, D. D.
 Francis, E. L., Jr.
 Frantz, C. C.
 Gaddis, J. L.
 Gallegos, D. M.
 Gallery, V. R.
 Gardberg, J. M.
 Gentry, H. R.
 George, D. M.
 Geraghty, T. J.
 Gironard, R.
 Glalze, S. S.
 Glaser, B. J.
 Goembei, M. H.
 Goodman, J. C., II
 Gordon, B. W.
 Grace, D. V., Jr.
 Grant, R. B.
 Greene, W. A.
 Grega, R. R.
 Gretkowski, H. J.
 Griffin, F. R.
 Griffith, F. T.
 Grim, C. A.
 Grizzard, R. C.
 Hagerty, B. C.
 Hall, H. H.
 Haller, L. J., Jr.
 Hammond, J. B.
 Hands, J. R.
 Heath, R. A.
 Hell, E. H.
 Hendrick, T. A.
 Herskind, C. C., Jr.
 Hickman, D. C.
 Hicks, L. R., Jr.
 Hirsch, N. R.
 Hodge, E. W.
 Hoehn, R. N.
 Holbrook, J., Jr.
 Hollenbeck, P.
 Holmquist, J. L.
 Holt, J. M.
 Horton, A. S.
 Huckaby, R. H.
 Huffines, H. E.
 Hughes, J. L.
 Hurchalla, C. F.
 Hurley, C. L., III
 James, L. W.
 Jesdale, W. T.
 Jessen, T. F.
 Joganic, D. F.
 Johnson, W. H.
 Joyce, J. E.
 Juvonen, W. H.
 Kelley, A. W., Jr.
 Keever, M. B.
 Kellenbarger, C. F.
 Kelly, J. M.
 Kelly, R. H.
 Kemp, B. C.
 Kilpatrick, C. D.
 Kimbrough, W. E., III
 King, P. F.
 Kirkpatrick, R. E.
 Kraus, G. L.
 Kravitz, D. G.
 Larkin, T. G.
 Latta, J. D.
 Lawson, A. T.
 Leahy, E. G., Jr.
 Lemley, A. J.
 Lilley, M. G.
 Loveless, M. E.
 Lynn, V. B.
 Lyon, P.
 Magne, D. F.
 Manasas, J. A.
 Margolis, M. B.
 Marino, G.
 Marsh, J. G.
 Marshall, D. E.
 Marshall, J. C.
 McBride, E. J., III
 McCall, James L., III
 McCarthy, S. L., Jr.
 McCasland, L. P., Jr.
 McCaughey, W. L.
 McConnell, J. J., Jr.
 McGarty, J. G.
 McGill, J. W.
 McGorty, D. J.
 McGraw, D. J.
 McGuire, D. P.

McIver, W. W.
 McLean, R. T.
 McLean, V. F., II
 McNair, G. Y., Jr.
 McPherson, M. E.
 McVay, J. L.
 Miller, F. E., Jr.
 Miller, L. P. Jr.
 Miller, R. D.
 Miller, R. W.
 Miller, T. P.
 Miller, W. E., Jr.
 Millett, A. R.
 Mills, W. R., Jr.
 Minihane, D. V.
 Mienyek, J. A.
 Montgomery, J. F., Jr.
 Mook, S. A.
 Mosteller, R. E., Jr.
 Mulholland, R. F.
 Mullins, R. R.
 Munn, G. A.
 Munzo, P.
 Murray, R. P.
 Myers, R. E.
 Nardo, J. F.
 Norman, K. A.
 Oryan, J. F., II
 Pagnani, A. C.
 Payne, J. K.
 Pennewill, C.
 Pepin, A. J., Jr.
 Perrine, P. W.
 Peterson, D. S.
 Peterson, R. L.
 Pfrimmer, R. E.
 Phenix, P. H.
 Pitney, L. J.
 Pope, J. H.
 Porter, F. B., Jr.
 Powell, D. L.
 Price, M. J.
 Price, R. K.
 Proctor, J. C.
 Putnam, P. S.
 Radnich, F. X.
 Ratcliff, S. S., Jr.
 Reed, J. W.
 Reimer, J. A.
 Rhodes, W. M.
 Ridgeway, W. T.
 Riemer, G. D.
 Rivers, E. G.
 Roe, R. R.
 Rogers, G. A.
 Rollins, G. J.
 Rowley, W. B.
 Russell, J. A.
 Sandys, E. J.
 Sanford, C. J.
 Santulli, A. J.
 Sattler, A. J., Jr.
 Saxon, D. W., Jr.
 Scabrough, H. D.
 Scarborough, P., Jr.
 Schooler, W. T.
 Severe, D. F.
 Sewell, W. C.
 Simpson, C. F.
 Sims, G. W.
 Skagen, R. C.
 Slusher, L. K.
 Smith, C. T.
 Smith, D. H.
 Smith, W. C.
 Snyder, R. E.
 Sole, J. A.
 Sorensen, S. L., Jr.
 Spencer, C. K.
 Springer, W.
 Steinberg, M.
 Stewart, S. R.
 St. John, G. J.
 Stone, G. B.
 Stoner, D. L.
 Stover, D. W.
 Straszewski, T. M.
 Swiney, T. E.
 Tara, R. B.
 Tate, J. R.
 Thompson, E. C., Jr.
 Thompson, T. L.
 Tobin, J. P.
 Toensing, C. E.
 Toler, T. W.
 Topping, R. W.
 Tousignant, D. A.
 Tretler, J. J.
 Tribble, J. W.
 Troestler, T. J.
 Trotti, J. H.

Tully, J. M.
 Turner, G. E., Jr.
 Tyksinsky, E. K.
 Vanvelzer, H. B., Jr.
 Vasquez, R. P.
 Vickers, J. L.
 Waters, W. L.
 Waters, W. M.
 Watts, G. L., Jr.
 Weldner, G. R.
 Weigand, P. S.
 Whalen, A. J.
 Wiesen, J. T.
 Wilks, D., Jr.
 Williams, C. A.
 Wilson, T. D.
 Wolf, G. F.
 Zablo, N. Z., Jr.
 Zell, M. P.
 Zubke, L. H.

Selected for Permanent Rank LDO

Barberi, J. M.	Capt
Georgia, D. C.	W-2
Young, L. W.	W-2
Gleim, E. C.	W-1
Greene, R. W.	W-1
Cox, F. J., Jr.	W-1
Knight, C. T.	1stSgt
White, R.	AMSgt
Abner, E. L.	AMSgt
Jackson, B. N.	AGySgt
Koyiades, J.	AGySgt

Warrant Officers

Transfers

Main, S. W. 0302
 Fr 3dMarDiv EDWDJan
 To 1stMarDiv

Retired

Collins, J. R.	0130
MarPac	ED31Dec
Hawkey, L. W.	3402
1stMarDiv	ED31Dec
Livingston, A. W.	4002
	ED1Dec
Dalrymple, W. L.	2502
MarPac	ED31Jan
Deason, A. J.	1502
FMFLant	ED31Dec
Eichman, M. D.	3010
MCB, CampPen	ED31Jan
Gilman, K.	0802
Denver, Colo.	ED31Dec
Lee, J. O.	6402
MarPac	ED31Jan
Merica, D. B.	3090
MCSC, Albany, Ga.	ED31Dec
Millican, P. F.	3402
MB, NS, SFRan	ED31Jan
Myers, K. D.	0130
	ED1Dec
Tupper, H. M.	3402
MCAS, El Toro	ED31Jan
Zawasky, G. E.	2502
1stMarBrig	ED31Jan
Bond, G. M.	3030
FortTrps, FMFLant	ED31Dec

Selected for Temporary Promotion

W-4

Dryden, R. L.
 Needham, E. C.
 Garrison, V. T.
 Stone, D. M.

W-3

Whitehouse, W. W.
 Suess, H. E.
 Donnelly, J. W.
 Bouher, E. J., Jr.
 Starks, H. A.
 Elliott, B. L.
 Dawson, R. F.
 Hughes, D. J.
 Lindon, J. N.
 Stephens, H. S.
 Oliver, C. R.
 Kulakowski, F. A.
 Ward, R. I.
 Wynant, N. E.

(Continued on next page)

Warrant Officers (Continued)

Selected for Permanent Promotion

W-3

Sparling, J. W.
Huntley, W. R.
Bormann, W. P.
Floyd, W. R.
Glovingo, Salvador
Thyrring, A. J.
Oliver, W. M.
Aldridge, J. B.
Cole, P. J.
Horstmann, Theodore
Kuchler, L. W.
Christensen, J. R.
Chapin, C. H., Jr.
Edmunds, M. S.
Farris, W. D.
Gryder, K. W.
Hajtun, P.
Baxter, M. G.
Lemolne, L. P.
Blalack, R. L.
Viekery, W. E.
Mervish, Nathan
Light, P. L.
Davis, H. R.
Calcagno, M. J.
Frey, E. C.
Allen, J. H., Jr.
Amend, R. G.
Head, Samuel
Jensen, D. L.
Sedinger, J. P.
Lockaby, P. L.
Ryan, J. E.
Degener, W. E.
Young, H. H.
Madore, N. C.
Cumiskey, F. P.
Millar, S. G.
Cole, J. E.
Slagle, J. W.
Wilkinson, H. E.
Burt, F. R.
Dryden, W. J.
Forgash, E. M.
Gustafson, O. D.
Kunkle, F. P., Jr.
Candler, O. G., Jr.
Miller, G. H.
Montgomery, B. E., Jr.
Moog, C. W.
Oldenburg, F. A.
Bourbeau, R. T.
Berling, R. R.
Sleger, J. Jr.
Locke, O. C.
Gerard, L. E., Jr.
Fullen, G. D., Jr.
Armstrong, L. O.
Post, R. L.
Jablonski, R. C.
Edmondson, P. A.
Niekowal, M. J.
Pike, E. A.
Kouba, Joseph
Garvey, J. M.
Johnson, R. M.
Stewart, R. F.
Green, H. A.
Shisler, F. J.
Huber, W. L.
Pettley, W. F.
Servis, C. W.
Mills, H. V.
Pasley, R. E.
Slavin, P. L.

W-2

Johnson, Brooks, Jr.
Glenka, J. M.
Clydesdale, R., Jr.
Morrison, G. E.
Rasmussen, J. H.
Sudduth, J. F.
Hall, J. C.
Reese, C. L.
Park, H. E.
Jenkins, C. E.
Vickerman, J. R.
Zimmerman, E. L.

Owens, N. S.
Davis, K. L.
Shelton, D. E.
Zarkos, T. A., Jr.
Seaman, G. W.
Kelly, E. F.
Good, H. M.
Block, R. E.
Walton, T. C.
Joyce, Danna
Jordan, T. E.
Strickland, G. E.
Yeom, A. W.
Emerson, S. M.
Nutter, E. L., Jr.
Doyel, G. R.
McLeod, S. L.
Antoine, G. E.
Larkin, H. E.
Waugh, C. C.
Peters, B. F.
Beattie, C. R.
Mihalak, S. J.
Huffaker, Lionel
Taylor, J. R.
Hamlet, D. L.
Donavan, S. H.
McLaughlin, P. H.
Costlow, W. E.
Shultz, J. S.
Smith, A. J.
Nickell, C. T.
Halsley, R. E.
Johnson, R. W.
Black, R. M.
Perry, G. A.
Foster, G. E.
Healey, P. N., Jr.
Boyd, O. A.
Owens, W. C.
Fields, John, Jr.
Watson, J. O.
Sturgis, R. C.
Duer, A. M., Jr.
Nestor, G. R.
Adams, J. A.
Exley, H. H.
Bryks, L. J.
Clark, Talmadge
Hull, D. L.
Duerr, E. J.
Covert, N. C.
Wood, E. N.
Myorski, S. M.
Harris, R. K.
Winship, L. E.
Parretti, Lawrence
Clay, R. L.
Wells, M. D.
Hill, W. J.
Magrath, Eric
Parker, G. R., Jr.
Durham, G. D., Jr.
Swearingen, T. F.
Fleming, R. R.
Noonkester, H. E.
Jones, S. J.
Angil, Thomas
Parsons, F. R.
Johnson, S. J., Jr.
Powell, R. T., Jr.
Fonstingel, A. J.
Gleim, E. C.
Smith, A. H.
Johnson, H. E., Jr.
Zimmerman, N. A.
McIntyre, Alice

W-1

Pegues, D. H.
Blaydes, A. M.
Holdridge, F. B.
Johnson, H. B.
Benyo, W. J.
Forman, J. R.
Stanton, A. W.
Chrisinger, E. L.
Pryor, R. E.
Butler, E. L.
Spangler, D. E.
Mills, G. R., Jr.
Roobian, L. L.
Sagar, H. L.
Filosa, R. W.
Wygai, K. E.
Copeland, F. E.
Hicks, R. C.
Usrey, J. C., Jr.
Wehmueller, M. A.
Langley, W. G.

Hattaway, E.
Schmidlen, O. M.
Ferguson, D. S.
Mitchell, W. J.
Snow, A. C.
McMasters, J. J.
Beck, K. R.
Baird, J. F.
Bunce, T. G.
Kennedy, J. A.
Manning, R. D.
Sophos, M.
Towel, F. D.
Kasica, E. M.
Kent, J. A., Jr.
Buckley, J. D., Jr.
Root, E. R.
Conroy, E. L.
Clemens, G. A.
Miller, R. B.
Creekmore, G., Jr.
McCarty, H. J.
Allen, C. E.
Wells, G. T.
Ames, C. S.
Ashley, W. C.
Hawkins, H. E.
Lovullo, J. A.
Bierhaalder, D. C.
Malone, G. E.
Cope, J. F.
Hastings, P. F.
Thomas, D. N.
Hoxie, R. F.
Dupont, J. A.
Justice, H. E.
Paige, F. E., Jr.
Etnyre, W. R.
Pishock, S. J.
Geyer, G. W., Jr.
Altman, J. L., Jr.
Gregory, W. T.
Barger, R. M.
Bressler, A. L.
Simutis, F. W.
Colangelo, N.
Connelly, J. W., Jr.
Harwell, R. W.
Portner, J.
Hasler, F. R.
Lorraine, J. B., Jr.
Kramer, V. S.
Tyree, F. H.
Maximin, W. K.
Becker, R. P.
Brooks, H. L.
Templeton, G. R.
Paige, J. J.
Grant, E. G., Jr.
Staggs, J. H.
Smyth, J. P.
Inman, R. L.
Hawlik, J. C., Jr.

Capt McPherson, S. B. MSgt
Capt Davison, J. C. MSgt
Capt Wildfang, H. MSgt
Capt Quinn, J. J. MSgt
Capt Losey, C. E. 1stSgt
Capt Farkas, J. 1stSgt
Capt Evans, I. F. 1stSgt
Capt Willis, J. 1stSgt
Capt Evans, W. T., III 1stSgt
Capt Haynes, J. L. 1stSgt
Capt Reilly, J., Jr. MSgt
Capt Houser, J. J. MSgt
Capt Wheeler, E. M. MSgt
Capt Cox, G. H. MSgt
Capt Devitt, J. R. AMSgt
Capt Briggs, J. D. AMSgt
Capt Wicker, S. T. AMSgt
Capt Spahr, E. J. AMSgt
Capt Delacqua, R. J. AMSgt
Capt Tinsley, H. AMSgt
Capt Shea, R. E. AMSgt
Capt Norton, J. J. AMSgt
Capt Hutton, J. W. AMSgt
Capt Godley, R. O., Jr. AMSgt
Capt Smith, D. M. AMSgt
Capt McCarthy, W. J. AMSgt
Capt Stevens, R. E. AMSgt
Capt Millang, H. B. AMSgt
Capt Garrett, C. Jr. AMSgt
Capt Hinds, G. E. AMSgt
Capt Mueller, C. J. AMSgt
Capt McGuire, T. W., Jr. AMSgt
Capt Darrow, M. L. AMSgt
Capt Johnson, J. E. AMSgt
Capt Eoff, H. AMSgt
Capt McVay, K. A. AMSgt
Capt Cotten, C. R. AMSgt
Capt Androsko, W. E. AMSgt
Capt Heinz, L., Jr. AMSgt
Capt Nagy, W. AMSgt
Capt Sutton, J. R. AMSgt
Capt Vaughn, E. R. AMSgt
Capt Gendron, L. G. AMSgt
Capt Carnahan, D. K. AMSgt
Capt Work, R. G. AMSgt
Capt Currier, B. D. AMSgt
Capt Nagy, C. AMSgt
Capt Flynn, R. F. AMSgt
Capt Bernier, R. J. AMSgt
Capt Andre, J. W. GySgt
1stLt Smiley, P. L. AGySgt
1stLt Lawrence, J. E., Jr. AGySgt
1stLt Amick, D. E. AGySgt
W-3 Cahaskie, C. S. AGySgt
W-3 Meece, D. O. AGySgt
SgtMaj Lorch, R. E. AGySgt
1stSgt Sheppard, W. F., Jr. AGySgt
1stSgt Fletcher, C. H. AGySgt
1stSgt Corbett, M. AGySgt
1stSgt Ditty, G. L. AGySgt
1stSgt Harris, W. R. AGySgt
1stSgt Thompson, M. E. AGySgt
1stSgt Dowling, C. H. AGySgt
MSgt Wheelchel, L. A. AGySgt
MSgt Holden, W. H. AGySgt

NEWS

in Names

At NAS, Pensacola, 2dLt David K. Mosher made the first student flight in the Navy's new T2J (Buckeye) tandem jet trainer. . . 2dLt Donald L. Stoner received Marine Corps Assn. award as honor man of 25th OCC, Top men in their companies were 2dLt Paul I. Carlson and 2dLt Warren H. Johnson. . . IN OPERATION TOP GUN, LtCol Robert F. Conley, VMF-235, placed highest among COs participating in air meet. . . Cadet Richard L. Frazier, of Wellington, Kans., became first MarCad to graduate from pre-flight training at Pensacola. . . Col W. G. Thrash, CO, MAG-13, and LtCol Carl Schmidt, CO, VMF-212, flew FJ-4Bs non-stop from Kaneohe to NAS, Alameda. The 5-hour, 15-minute flight used "buddy refueling" by other FJ-4Bs. . . MCB, 29 Palms is living up to its name. Where there was none, there are now 44 imported, transplanted palm trees. Count 'em.

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1956 Kaman flew the first helicopter to be powered with a gas turbine designed specifically for helicopters.

1959 Kaman converts its production 100 percent to turbine powered helicopters, becoming the first major helicopter company to take this forward step.

THE YEARS BEHIND PUT US YEARS AHEAD IN TURBINES



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